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LETTER FROM THE COMMISSIONER

I had the privilege of being appointed Commissioner of Agriculture by Governor Jeb Bush on January 24, 2001, replacing Commissioner Bob Crawford, who left to become the Executive Director of the Florida Department of Citrus. Having served in various capacities throughout this Department for the past 13 years, I assumed the leadership of an agency I knew well from personal experience.

In talking with Floridians about our Department, I am constantly reminded that while supporting our state's agriculture industry is perhaps our best-known role, many of our programs are largely unseen by the public. Although often not very visible, our programs protect the safety and well-being of our state's residents and visitors.

The Florida Department of Agriculture and Consumer Services has a broad range of responsibilities, overseeing numerous programs that touch the lives of all Floridians every day. Whether it's promoting Florida agriculture by opening or expanding markets abroad, protecting consumers by ensuring the safety of the food chain, or battling wildfires throughout our drought-stricken state, our Department's dedicated employees serve the public in many ways.

As the second part of our agency's name indicates, consumer services is a major aspect of our Department's mission. Our Division of Consumer Services serves as Florida's clearinghouse for consumer complaints and operates the state's Consumer Help Line (1-800-HELP FLA). The division administers numerous consumer protection and business regulation programs, such as the No Sales Solicitation Calls List, the motor vehicle Lemon Law, charitable solicitation, auto repair, health clubs, sellers of travel and dance studios.

Fiscal year 1999-2000 was another eventful year for our Department. Cash receipts for Florida farmers hit an all-time high in 1999, passing the $7 billion mark. The Citrus Canker Eradication Program continued to battle this devastating plant disease that threatens to destroy commercial and residential citrus trees in southeast and southwest Florida. We saw the culmination of a decade-long effort by the Department to open China to U.S. citrus as the first commercial shipment was delivered to that country in March.

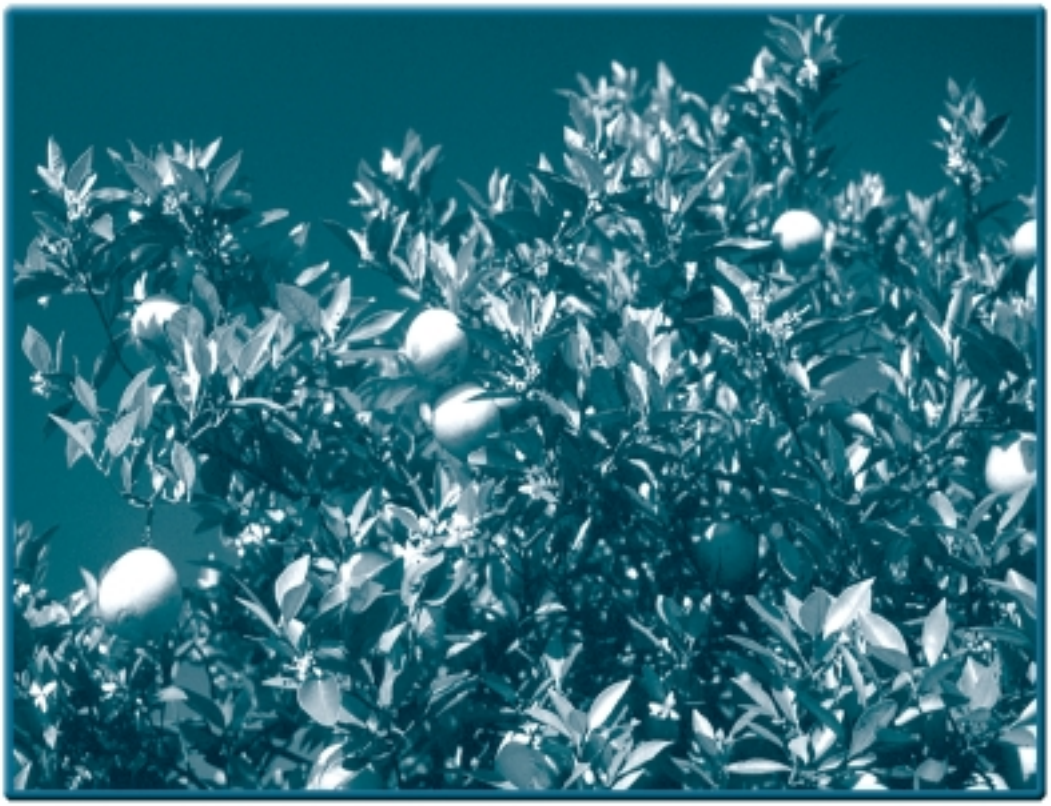
Our Department's firefighters battled wildfires that scarred our state, which continues to be gripped by a drought that began in 1998. More than 6,000 fires raged in our state last year, burning more than 200,000 acres. This wildfire season was especially tragic for our Department Family, which lost one of its own with the death of George "Bo" Burton, Firefighter Rotorcraft Pilot for the Division of Forestry, who was killed on June 4, 2000, while fighting a wildfire in Lee County.

This Annual Report not only provides an overview of the past year's activities, but helps foster a better understanding about the breadth and depth of our Department's responsibilities. I hope you find it beneficial.

Sincerely,

Terry L. Rhodes

TERRY L. RHODES
COMMISSIONER OF AGRICULTURE



INTRODUCTION

Agriculture is a vital dynamic factor in Florida's economy. The more than 280 commodities grown commercially make Florida one of the most diversified agricultural states. These farm products generate cash receipts of $7 billion, while annual timber sales add an estimated $430 million. The value of all agriculture-related activities is estimated to contribute more than $54 billion to the state's overall economy.

The activities of the Florida Department of Agriculture and Consumer Services cover not only agriculture, but consumer matters as well, and make the Department the largest and most diverse state agriculture department in the country.

Support services offered to agriculture by the Department include collecting statistics on production, administering animal health programs, testing feed, seed and fertilizers, and conducting plant protection, inspection and certification programs.

Its far-reaching agricultural responsibilities include promoting Florida agriculture through numerous advertising and marketing campaigns aimed at increasing domestic and foreign sales. The Department's award-winning "Fresh from Florida" campaign continues to promote Florida agricultural products in foreign and domestic markets. This year, Florida Agriculture Commissioner Bob Crawford continued efforts to expand the market for Florida agricultural products abroad, particularly in China.

Florida's extensive coastline makes it a major supplier of seafood, so the Department provides seafood marketing and educational materials to producers, wholesalers, retailers and consumers. The Department's newest Division, the Division of Aquaculture, was created during the 1999 legislative session and houses the shellfish evaluation and assessment programs, the shellfish processing plant inspection, the shellfish laboratory, and the aquaculture component of the Department.

The Department enforces animal and plant health regulations designed to control the spread of pests and diseases. It inspects seed and fertilizer and other agricultural products to make sure the farmer, as well as the homeowner or backyard gardener, get what they pay for.

The Department's programs to preserve Florida's natural environment include the regulation of pesticides, promotion of Best Management Practices for soil and water conservation, and management of state forests and other public lands. Education also is key to protecting the environment.

Food processing, distribution and retail facilities are inspected regularly by Department personnel, and thousands of sophisticated analyses of food samples are performed in Department laboratories to ensure a safe and wholesome food supply. To this end, Department staff monitor some 35,000 retail food stores, processing plants and similar businesses.

The prevention of food-borne illness is of primary concern to the Department, and it has the authority to halt the sale of any products considered a public health risk. It also enforces the country-of-origin law, and, since the passage of the North American Free Trade Agreement, has increased its analyses of imported produce for contamination and pesticide residues.

The Department is the state's clearinghouse for consumer complaints and also functions as Florida's agent for the Consumer Product Safety Commission regarding product recalls, inspections and investigations. The Office of Agricultural Law Enforcement continues to work with the Division of Consumer Services to crack down on auto repair fraud and other crimes against consumers.

The Department also conducts inspections of the petroleum distribution system and analyzes samples of petroleum products, regulates the accuracy, condition and use of all weighing and measuring devices, and is responsible for safety inspections of amusement rides.

The Department is the state's lead agency in acquiring food, water and ice for disaster victims. In the event of disaster, USDA commodities are distributed to those in need. Through the Florida Mutual Aid Plan, the Department participates with other state law enforcement agencies as primary responders. It is designated as the animal liaison to coordinate the care and welfare of livestock and pets in the event of disasters. When wildfires threaten property and lives in the wildland/urban interface, the Department's trained firefighters respond.

SUPPORTING FLORIDA AGRICULTURE

Statistical Reporting

Reliable information is essential to making production, marketing and policy decisions for the agricultural community. The Department shares in a cooperative federal/state program responsible for collecting and disseminating Florida agricultural statistics. Information on the state's major commodities is gathered through on-site producer surveys, voluntary mail questionnaires and telephone and personal interviews. Statistics compiled from this data are available in over 200 reports issued annually.

In 1999, Florida's agricultural cash receipts amounted to $7.07 billion, 1.5 percent higher than in 1998. Higher receipts for citrus, sugarcane and floriculture offset lower receipts for aquaculture, vegetables and strawberries.

Florida ranked second nationally in returns from sales of all crop commodities. The state ranked second behind California in cash receipts for total vegetables and total fruits and nuts, and led the nation in production of citrus, sugarcane, foliage plants, cut floral greens and tropical fish.

Citrus

An initial citrus production forecast is issued in October and modified monthly through the citrus season based on fruit size measurements and observations on droppage. These forecasts are based exclusively on objective data obtained directly by field personnel, including an extensive limb count survey conducted from July into September to estimate fruit set per tree. Production for the 1999-

2000 season for all oranges was 233 million boxes. Total grapefruit production was 53.4 million boxes.

Production of all citrus crops in the 1999-2000 harvest season totaled 298.4 million boxes. Cash receipts for all citrus crops sold in 1999 totaled $1.92 billion, an increase of 14 percent from the sales of $1.68 billion in 1998.

Vegetables

Vegetables accounted for 20 percent of all cash receipts in 1999, compared to 23 percent in 1998. Tomatoes, peppers, sweet corn and snap beans accounted for the largest amount of sales among vegetable crops.

Greenhouse and Nursery Production

The total value of Florida greenhouse and nursery production exceeds $1 billion. The foliage and floriculture industry contributed $671 million, up slightly from 1998.

Berries and Melons

Strawberry production for 1999 was up slightly from the year before, but a lower price resulted in cash receipts of $151 million compared to $161 million in 1998. Lower prices for watermelons offset significantly higher production than in the previous season, resulting in an increase of 20 percent in total value to $72 million in 1999.

Field Crops

Potato production in 1999 increased 21 percent from the previous year, but a lower average price resulted in cash receipts of $124 million to growers, about the same as in 1998. Sugarcane production was down from the previous year but total cash receipts, at $520 million, were 10 percent above the $479 million in 1998. Peanut growers saw their value of sales decrease 13 percent to $60 million, despite a production increase. Tobacco growers produced 15.3 million pounds of tobacco, valued at $26.4 million in 1999, a decrease of 9 percent from the previous year. Despite increases of 40 percent in cotton lint production and 38 percent in cottonseed production, cash receipts totaled $28 million in 1999, compared to $35 million in 1998.

Other Fruits and Nuts

Receipts for other fruits and nuts, such as avocados, blueberries, mangos and pecans, increased 12 percent to $75.9 million.

Dairy

Milk production increased slightly in 1999, but lower prices led to decreased receipts of $412 million compared to $424 million in 1998.

Cattle and Calves

Beef cow numbers increased slightly during 1999. Higher prices offset a decrease in cattle marketings, and cash receipts for all cattle and calves were up from $291 million to $310 million.

Poultry and Eggs

Egg sales were down 4 percent from 1998 to $108 million due to a 13 percent decrease in price. Broiler production was up 7 percent in 1999, but sales decreased slightly to $246 million.

Aquaculture

Aquaculture contributed over $85 million to total cash receipts, down 18 percent from 1998. Tropical fish sales decreased about 22 percent.

Honey

Florida was fourth in the nation in honey production in 1999, with 23.3 million pounds valued at $12.3 million.

Fruit and Vegetable Inspection

A support function of the Department provides on-request inspections for the purpose of certifying the quality and/or the condition of produce being shipped in and out of the state to national and international markets. This service enhances the stability of the produce market by using a disinterested third party to certify the quality of the produce being shipped or received. The inspection process is accomplished through a joint effort of the Department and U.S. Department of Agriculture.

During the 1999-2000 season, Department personnel spent more than 300,000 hours inspecting more than 14 million tons of product. The Department continually explores new and more cost-effective methods of inspection, as well as ways to add value to the inspection services. This initiative resulted in the development of the Citra Net web site (www.citranet.net). The Citra Net program was developed in cooperation with Florida Citrus Mutual and allows brokers, agents and growers to access data on citrus delivered to processing plants by 6 a.m. on the morning following a delivery. The Citra Net system has received about 400 password requests and received about 3,000 hits a day during the height of the season.

Market News Service

The Department's Market News Service, operated in conjunction with the USDA, is the source for daily marketing information. Market News compiles and issues reports on price, supply, demand, movement and market conditions of Florida agricultural commodities. These reports provide current price quotations on fruits and vegetables, livestock and horticultural products.

In the 1999-2000 fiscal year, more than 1,000 printed agricultural reports were released per week. "Florida AgLine," a recorded telephone service providing 24-hour access for farmers and businesses, assisted an average of 800 callers per month. Market News information is available on the Internet immediately following the release of the information.

This unbiased commodity trading information serves producers, processors, distributors, retailers and consumers and helps maintain an orderly distribution of agricultural products.

License and Bond

The Department continued its support of Florida agriculture by conscientiously administering Florida's Dealers in Agricultural Products Law. This law ensures that Florida producers of agricultural products covered by the license and bond provisions receive proper accounting and payment for their products. The Department issued 4,294 licenses (an 11 percent increase over the previous year) and collected $570,484 in license fees during the fiscal year 1999-2000. The Department managed $75,943,600 in bond protection for Florida growers.

Complaints against dealers in agricultural products must be filed within six months of the date of sale and total a minimum of $250. Department associates completed 60 unlicensed dealer complaint investigations and 84 licensed dealer complaint investigations in the past year. These investigations resulted in a recovery of $1,117,549 on behalf of Florida agricultural dealers. This figure represents a 31 percent increase over the 1998-99 fiscal year and the second highest amount ever recovered for Florida producers.

The Department closely monitors dealers to make sure they maintain adequate bonds to protect Florida growers. Department associates conducted 530 bond and compliance audits of dealer's records during the year. These audits are designed to ensure that bond amounts are maintained, to determine whether unlicensed dealers were exempt from license and bond requirements, to determine if prospective licensees were conducting business in a manner requiring licensure and to document violations of Department enforcement actions.

The Department opened 22 new enforcement cases, closed 42 cases and collected $33,350 in administrative fines during the 1999-2000 fiscal year. Enforcement actions resulted in an additional $412,739 of bond protection for Florida growers, and 21 of the cases ended in licenses being issued. The Department developed a streamlined administrative fine structure, which will be implemented in the new fiscal year.

State Farmers' Markets

The Department manages five major program initiatives: State Farmers' Markets; Community Farmers' Markets; Women, Infants and Children / Farmers' Markets Nutritional Program (WIC/FMNP); county fair permitting and AgVenture Services.

State Farmers' Markets tenants and clients marketed $213,000,000 in produce, livestock and value-added products during the fiscal year. Twenty-nine-thousand WIC recipients redeemed $312,000 in Farmers' Market Nutrition Program coupons at their local community farmers' markets. This program promotes a healthy diet by encouraging consumption of fresh fruits and vegetables by WIC mothers and children while boosting farmers' sales at participating locations.

The Community Farmers' Market program assisted in the establishment of nine new farmers' markets, bringing the total number in operation to 42 markets. The AgVenture Services program assisted in the launching of four agricultural enterprises.

Livestock

The Department serves the animals and citizens of Florida to prevent exposure to disease. Its primary statutory authority (Chapter 585, Parts I and II) directs goals and objectives to protect the animals and citizens of Florida from exposure to disease. The results directly affect the general economic health of Florida. Therefore, the objective of the Department is to reduce the number of animals infected with or exposed to dangerous transmissible diseases. These diseases are transmissible to animal population, and some are transmissible to humans. This objective will be continually

challenged by new and emerging issues/diseases that require the continuance of current activities which involve testing and vaccinating animals and surveillance and monitoring of animals. Critical control activities include the following:

- Prevent, control and eradicate animal diseases
- Conduct animal-related diagnostic laboratory procedures
- Inspect livestock on farms/ranches for sanitary/humane conditions
- Identify the origin and health status of imported animals.

These activities have been successful in effectively controlling and eradicating animal diseases including food-borne zoonotic diseases in livestock (Equidae, cattle, swine, goats, sheep, Cervidae, domestic fowl and ratites) through state-mandated programs. Many diseases and pests have been eradicated through the years (i.e., bovine tuberculosis, screwworm, cattle fever tick, hog cholera, equine piroplasmosis and various poultry diseases). Hopefully, Florida will regain its bovine brucellosis-free status in the near future, and progress is being made to achieve free status in both swine brucellosis and pseudorabies. Federal support to conduct the activities, however, has continually declined.

Animal Disease Control

The Department is responsible for administering the state's animal disease control and eradication programs. The Department, in cooperation with USDA, has moved beyond traditional perceptions of animal disease control and eradication programs by addressing public health issues and major economic impacts in development of new programs. The publicity of West Nile Virus (WVN) in the northeast United States and the Classical Swine Fever occurrence in Europe emphasizes the necessity of having a strong active animal disease monitoring program in place with an open line of communication with public officials. With human Salmonella enteritidis (SE) and E. coli (0157) outbreaks occurring in increasing numbers worldwide, public awareness of potential pathogen introduction into animal food products has been heightened. Rather than perceiving disease control and eradication programs as bureaucratic obstacles, the public is demanding that more be done to protect the nation's animal-origin food supply. These needs, as perceived by the producer, the consumer and associated animal industries, will influence the overall acceptability and effectiveness of future disease control and eradication programs. Many of the Department's current program activities take these factors into consideration.

Cattle

Brucellosis

Florida has taken major steps to combat this infection since April 8, 1999, when B. abortus biovar 1 was isolated from a cow that was slaughtered. This reactor was disclosed in a dairy herd in Green Cove Springs. Since then, the entire herd has been adult vaccinated with RB51 (Brucella abortus vaccine).

The original reactor animal was imported from another state. All adjacent herds have tested negative. The dairy has now tested negative in two whole-herd tests. If all goes well, Florida will re-achieve Brucellosis Class Free status sometime in 2001.

There were 466,288 cattle tested for brucellosis, and 120,443 cattle were vaccinated against the disease in Florida during the fiscal year. None were infected.

Tuberculosis

During the year, 7,274 cattle in Florida were tested for tuberculosis; none were infected.

Johne's (Paratuberculosis) Disease Voluntary Program

The Florida Johne's Advisory Committee has completed development of a voluntary program for Florida producers. Patterned after the U.S. Voluntary Herd Status Program, Florida's program will allow producers to be assigned a status level based upon certain minimum test requirements. The committee also developed an educational program and Best Management Practices to prevent or eliminate Johne's from a herd. This industry-driven program is gaining acceptance rapidly.

As an incentive for producers to participate, the Department will conduct Johne's testing at the cost of $2 per sample (minimum of 30 samples) upon execution of a Johne's Testing Agreement, versus the regular cost of $5 per sample without an agreement. Beef and dairy producers submitted in excess of 30,000 samples, making Florida's program one of the most active in the United States. Information regarding levels of infection and management suggestions are reported back to producers and participatory veterinary practitioners.

Equine

Equine Infectious Anemia

Equine Infectious Anemia (EIA), also known as "swamp fever" is an incurable blood-borne disease that affects only members of the equine species. It is transmitted primarily by large biting flies but may also be transmitted by contaminated needles and surgical instruments and through breeding. Once an animal is infected, it remains infected for the rest of its life. While some horses die from acute infections, most remain as seemingly symptomless carriers. However, infected animals are capable of transmitting the disease and pose a threat to healthy animals. There are currently no vaccines or effective treatments for this disease.

EIA is a disease of worldwide significance. In some foreign countries, the disease incidence may be as high as 50 percent or more. In the United States, it occurs in most every state, however, 90 percent of the cases occur in what is known as the "hot zone," those states bordering the South Atlantic Coast, the Gulf of Mexico and the Mississippi River Basin, including Oklahoma and Texas. Disease risk in these areas is higher because environmental conditions are more favorable for prolonged insect vector seasons.

Florida's equine industry continues to be a vital economy to the state, and the Department plays an important role in safeguarding this valuable state resource from the potential devastating effects of this disease. The Department, with support and cooperation from the state's equine industries, was one of the first states to implement an EIA disease control program.

Last year, more than 1.6 million horses were tested nationally. Of this number, 965 EIA- positive horses were disclosed. In Florida there were 120,402 horses tested with only 20 EIA- positive horses. On a national level, only 10 to 15 percent of the horse population is tested, while in Florida more than 30 percent of its equine population is tested. In spite of being in the EIA "hot zone," Florida's EIA control program continues to keep the disease incidence at a very low rate (0.016 percent), lower than the national average of 0.06 percent. This can be attributed to the

Department's effective EIA control program, strict enforcement of the EIA regulations and strong support from the state's equine industry.

Arboviruses

Arboviruses can be maintained in nature through transmission between susceptible mosquitoes, although bird populations tend to be reservoirs for these diseases. People and domestic animals that contract these diseases can develop clinical illness, including encephalitis, but are generally considered "dead-end" hosts in that they do not contribute to the natural transmission cycle (i.e., bird-mosquito-bird cycle).

The Department, in conjunction with the Florida Department of Health, has a vigilant surveillance program to monitor for arboviruses in Florida. This program involves testing mosquito pools, sentinel chickens and dead wild fowl for signs of these viruses.

Eastern Equine Encephalitis

Eastern equine encephalitis (EEE) is a viral disease that attacks the central nervous system of horses. It is spread by mosquitoes, which transmit the disease from infected birds. Transmission of the disease from horse to horse or from horse to humans is highly unlikely. The mortality rate for infected horses is 50 to 90 percent. Vaccinating horses properly will prevent them from contracting the disease.

EEE can cause fever, impaired vision, irregular gait, reduced reflexes, inability to swallow, convulsions and even death in horses. The disease is most commonly detected in horses in Florida from April to August. The Department regularly advises that previously unvaccinated horses should be given two initial injections of vaccine about three to four weeks apart, and after initial vaccination, all horses should be vaccinated twice yearly. Vaccinations should be given by a licensed veterinarian prior to the mosquito season in March or April and again in September or October.

St. Louis Encephalitis

St. Louis Encephalitis (SLE) is a mosquito-borne viral disease that causes inflammation and swelling of the brain. In humans, symptoms can range from fever with headache to coma. Symptoms may include fatigue, dizziness, weakness, seizures and confusion. There is no vaccine routinely used for SLE. Unlike EEE, SLE is rare in horses in Florida and does not cause such severe clinical signs.

West Nile Virus

While WNV has not been identified in any southern state, the WNV Coordination Group has developed an interagency response plan in case WNV invades the state. There have been confirmed equine cases of WNV in New York, New Jersey, Rhode Island, Massachusetts and Connecticut. Human cases have also been confirmed in New York and New Jersey. Health officials have been particularly concerned about the phenomenon of the virus to overwinter this past year in New York; usually winter kills mosquito populations, thereby killing the virus for that year.

In some laboratory tests, WNV reacts the same way as St. Louis Encephalitis, causing some confusion as to the identity of the particular disease. In Florida, laboratory samples from any person or animal suspected to have mosquito-borne viral encephalitis are also tested for WNV. The Department's Diagnostic Laboratories include the WNV test in their encephalitis testing panel.

Concern regarding WNV caused some European countries to place import restrictions on horses imported to Europe from West Nile Virus affected areas. In light of the movement restrictions, the U.S. Olympic Team moved their May 2000 dressage trials from New Jersey to Florida.

Screwworm

Screwworm is the common name of a pest native to the tropical areas of North, South and Central America that causes extensive damage to domestic livestock and other warm blooded animals. The larvae of these pests feed on the raw flesh of the host animal. Rare human cases have been reported.

On February 27, 2000, 17 horses from Argentina entered the United States through a USDA quarantine station. Two of the horses were eventually shipped to Georgia, five to California, one to Pennsylvania, one to Texas and eight to Florida. On March 2, 2000, a private practitioner found one of the horses in Florida to have screwworm larvae. The horse and premises were treated to ensure that any larvae that may have exited the wound were killed. No other horses in the Argentine shipment were found to be infested.

The United States has been free of self-sustaining screwworm populations since 1966. The U.S. livestock industry could suffer $750 million in production losses annually if this pest were reintroduced to the United States.

Swine

There were 17,951 breeder/feeder swine and 23,036 slaughter swine inspected at livestock markets in Florida during 1999-2000. There were 7,724 on farm inspections.

Swine Brucellosis

The Department continues testing slaughter swine for brucellosis at livestock markets as part of the national swine brucellosis eradication program since this disease has become a significant public health problem for those working in swine slaughtering plants. During the year, 8,605 swine were tested for brucellosis; 0.43 percent were infected.

Pseudorabies

During the year, the Department continued to make progress toward eradication of Pseudorabies. USDA allocated funds for depopulation of infected herds. Florida is currently in Stage III Status of the National Pseudorabies Eradication Program. Anticipated date for Stage IV is 2001. Of the 8,172 swine in Florida that were tested for pseudorabies, 0.62 percent were infected.

Garbage Feeders

During fiscal year 1999-2000, the Department licensed 167 garbage feeders and conducted 3,374 garbage feeder inspections. There were 13,620 garbage fed swine in Florida last year.

Feral Swine

In addressing the feral swine problem in Florida, the Emerging Animal Disease Assessment Unit assisted in collaborating on the federal Uniform Methods and Rules (UMR) Rough Draft written for the United States Animal Health Association.

Cervidae (Deer and Elk)

The captive cervid industry is growing within the state. While this industry is licensed primarily by the Florida Fish and Wildlife Conservation Commission, the Department is a partner involving dis-

ease control issues and importation policies. Several innovative programs are being instituted to prepare these herds for disease certification and accreditation. The Department continues to monitor the status of tuberculosis in Michigan's cervid and bovine populations, as well as their potential effect on Florida.

Performing Elephants

Florida is the winter home for many circus road shows. Human tuberculosis was disclosed in several elephants in different circuses, resulting in these animals being taken off the road and returned to their winter quarters for evaluation and treatment. The Department has been involved with quarantine procedures; education of handlers, veterinarians and trainers and overseeing treatment. This has reduced the potential for spread of this disease to humans.

Human tuberculosis was not the only disease to affect elephants in Florida this year. One African elephant in Tampa exhibited abnormal behavior and fatally injured its trainer. The Department's Diagnostic Laboratory in Kissimmee found the elephant to be infected with encephalomyocarditis virus, a virus which affects mainly the brain and heart of elephants, apes and humans, as well as other species.

Poultry

The Department is responsible for testing and monitoring commercial egg breeding flocks and commercial broiler breeding flocks for numerous diseases, including Salmonella enteritidis (SE), Mycoplasma gallisepticum (MG), Mycoplasma synoviae (MS) and Avian Influenza (AI). Division field personnel continue to inspect and test for Pullorum-Typhoid (PT) on all poultry coming into Florida fairs for exhibition. They also routinely inspect approximately 800 farms for Dead Bird Disposal methods.

The Department also inspects and tests flocks in accordance with the National Poultry Improvement Plan (NPIP) program. In Florida, this involves approximately 27 hatcheries, 19 dealers and more than 140 independent flocks.

A new program was recently co-developed by the Department and the Suwannee River Water Management District for implementing a “Poultry Best Management Practices” program.

In addition, the Department issues permits for the import/export of poultry in Florida; 1,102 permits were issued this year for movement of poultry and poultry products. Also this year, the Department has implemented a fee for processing Avian Health Certificates.

Sheep and Goats

The USDA is implementing a Voluntary Scrapie Flock Certification Program in Florida with the full cooperation of the Department. Educational information concerning this industry driven program has been distributed by veterinary medical officers and field personnel to interested flock owners. Three flocks are currently enrolled and approved by the State Scrapie Certification Board, and interest seems to be growing.

Marks and Brands Program

The Department issued 188 new livestock brand certificates and renewed 932 last year. The total number of brands registered in Florida is 5,610.

Livestock Haulers Permits

The Department issued 2,064 livestock haulers permits.

Health Certificates

The monitoring of the movement of livestock into Florida through the requirement of an Official Certificate of Veterinary Inspection is the Department's first line of defense against the transmission of animal diseases. Through the effort of the Department in cooperation with USDA, a pilot program is under way to develop a method to electronically transmit and analyze the necessary information for interstate movement of animals.

This fiscal year, the Department processed 35,136 certificates representing more than 950,000 animals moving into or out of Florida. Cattle, beef and dairy animals, were the primary species moving into Florida along with horses, swine, goats, sheep, ratites, Cervidae and exotics. All livestock transported into Florida are subject to certificate verification by Agricultural Law Enforcement officers.

Emerging Animal Disease Assessment Unit (EADAU)

During 1999-2000, the Department organized the Emerging Animal Disease Assessment Unit (EADAU), which helped create and maintain a highly functional working relationship with private industry, the University of Florida and USDA for dealing with emerging animal disease problems. The EADAU has been in the forefront of emerging animal disease issues in Florida and across the country regarding exotic (foreign) ticks, feral swine and associated diseases such as pseudorabies and swine brucellosis.

In order to combat disease risks associated with exotic ticks entering the country on shipments of reptiles and other animals, the EADAU developed a comprehensive approach to answer this threat. The EADAU formed a partnership with the Florida Cattlemen, the reptile industry in Florida, regulatory agencies and other parties to mitigate this threat. The EADAU promptly developed a tick surveillance system and put it into operation. The EADAU also co-developed with USDA a computerized record system utilizing the Premises Identification Form and Epidemiology Forms developed by the EADAU. The EADAU also devised methods to rid infested premises of ticks. A Tick Field Guide was written to instruct inspectors on how to proceed with investigations on infected premises.

The EADAU conceived the idea of a Florida Association For Herpetological Improvement (FAFHI); members of the EADAU developed and presented this concept to the herpetological (reptile) industry. This concept is being used as the format for developing a national certification and best management practices program for the reptile industry.

Invasive Species

The Florida Legislature mandated creation of the Florida Pest Exclusion Advisory Committee (PEAC), which is charged with bringing together the stakeholders from both the plant and animal sides of the invasive species issue. This year, the PEAC met, conducted research and toured critical facilities.

Emergency Rules

The Department released an unprecedented three emergency rules during the 1999-2000 fiscal year: one to combat the threat of exotic ticks being imported into the United States with the potential to carry heartwater disease, and two requiring more stringent testing for Contagious Equine Metritis (CEM).

5C-ER-99-1 (Heartwater)

Heartwater is an acute tick-borne disease of domestic and wild ruminants, including cattle, sheep, goats, deer and antelope. This killer disease is caused by the rickettsial bacterium *Cowdria ruminantium* which is transmitted by ticks of the genus Amblyomma. It is characterized by a rapid rise in body temperature, loss of appetite and respiratory distress, followed by nervous signs such as circling motions, incoordination, recumbency and paddling movements of the limbs. Should this disease enter the United States, mortality rates in susceptible species could range from 40 percent to approaching 100 percent. Since there is no officially recognized treatment or practical vaccine to protect against the disease, prevention relies on control of its tick vectors. The same ticks are also potential vectors of diseases which may affect the general public. The justification for this emergency rule was the November 29, 1999, notification that 15 Amblyomma sparsum ticks collected from tortoises in Hillsborough County tested positive for *Cowdria ruminantium* (Heartwater) organism.

5C-ER-00-1 and 5C-ER-00-2 (Contagious Equine Metritis)

Contagious Equine Metritis (CEM) is a highly contagious venereal disease that can affect all equid (horses, donkeys, mules, etc.) and is caused by the bacterium *Taylorella equigenitalis*. The infection can result in short term infertility in mares that is sometimes associated with a vaginal discharge and rarely abortion. Mares can become unapparent carriers of the bacterium in their reproductive tracts and can shed the organism into the environment and transmit it through subsequent breeding. Stallions do not develop clinical signs but can carry the organism on their genitalia for years and spread the disease by breeding susceptible mares.

CEM is considered an exotic disease in the United States, which means it is not found in the native horse population. However, there are at least 25 countries and/or territories where CEM exists, including a number of the member states of the European Union. CEM is a serious venereal disease because it is highly contagious. CEM, if it became established in the United States, would have a devastating economic impact on the horse industry. While there is no vaccine against CEM, there are ways to detect infected horses and to rid infected stallions and mares of the bacterium via treatment and testing protocols.

The February 11, 2000, detection of CEM cases in the United States from imported stallions caused concern among state health officials about the effectiveness of the USDA required protocol for testing imported animals. These recent cases have prompted some state officials, including Florida, to recommend that USDA/APHIS strengthen its federal testing procedures for horses from known CEM-affected countries.

Education and Outreach

The Department continues to emphasize public information and awareness; Animal Industry news releases, brochures and other important information is available online at http://doacs.state.fl.us/~ai/aiindex.htm.

Forms currently available on the web site, for electronic submission or mailing, include the following:

- Application for Registration as Livestock Dealer
- Application for Permit to Feed Garbage to Swine
- Owner's Agreement for Quarantine for Contagious Equine Metritis (CEM)
- Application for Brand Record
- Application for Livestock Haulers' Permit
- Request for Brucellosis (Re)Certification
- Application for Permit to Transport Animal Carcasses/Refuse
- Official Certificate of Veterinary Inspection order form
- Disease Reporting Form
- Disaster Animal Response Team training request form

Diagnostic Labs

Florida has a widely diverse animal industry which occupies a unique geopolitical position in the arena of animal diseases because of its extensive coast line, a climate conducive to the proliferation of many disease vectors, an ever-increasing number of imported exotic species, an expanding tourist trade and close proximity to the Caribbean and other points south. On a national scale, Florida represents a potential hazard to the rest of the nation if it does not have a diligent, watchful system of animal disease diagnosis. The full service, not-for-profit, state-supported laboratory system's staff is composed of veterinarians and technicians with highly specialized training in various diagnostic disciplines.

Thirty-seven diseases are considered potentially harmful to the animal industry or the general public and are therefore listed as reportable. In the Carribean, the appearance of exotic or previously eradicated diseases emphasizes the need for continued vigilance.

The Department's professional staff of veterinarians and technicians with specialized training in the various disciplines of diagnostic veterinary medicine (toxicology, pathology, bacteriology, virology) provides the knowledge and experience necessary to perform these highly technical analyses and studies.

In addition to the monitoring and surveillance of animal diseases, the laboratories also provide testing for other diseases of public health significance such as Lyme's disease, Rocky Mountain Spotted Fever, chlamydia (psittacosis), which is transmitted from exotic birds, and salmonellosis.

The Animal Disease Diagnostic Laboratories (Kissimmee and Live Oak), certified by the American Association of Veterinary Laboratory Diagnosticians as an all species, full-service laboratory system, provides state-of-the-art diagnostic laboratory services to the various animal industries and populations of the state. Providing these services ensures the early detection of changes in existing monitored diseases and the emergence of new disease threats to the various animal industries.

Molecular Biology/PCR Lab

A new set of procedures to detect microbial agents involves the amplification of genetic material through Polymerase Chain Reaction (PCR) techniques. The Kissimmee laboratory has created such a facility through the renovation of existing space using skilled in-house talent in the process. Equipment for this effort was purchased with OCO funds from last fiscal year. Assembly of the needed staff is ongoing.

Workload

Laboratory procedures in fiscal year 1999-2000 exceeded the previous year by over 87,000 (16.9 percent). Fees generated exceeded the previous year by over 50 percent.

Outreach

The Department began testing a courier system to service veterinary clinics in the Kissimmee/St. Cloud area as well as the south Orlando area to provide a more prompt turnaround time and, therefore, better service.

The Department has a successful ongoing student externship program in place. Each year, one student is funded by the Florida Cattlemen's Association.

Quality Assurance/Control

The Department is collaborating with Land Grant Universities, livestock and farm organizations and private veterinarians to assist food animal producers of the state with a new approach to animal health concerns. Consumers are seeking higher quality and safer food products than ever before. They are demanding that food safety programs be extended to the pastures and production facilities. To address these demands, the Department developed a volunteer certification program that will identify animals and farms as being in an environment where quality assurance is a key component.

This is a voluntary program based on interaction between producers and the Department to assist in accessing more competitive marketing opportunities. Once certified and approved by the Department, animals will be eligible to be identified and marketed as "Healthy from Florida." Producers will be able to individually identify animals to inform potential buyers of the added value of these animals based on participation in this quality assurance program.

The Department objective is to provide a unique, innovative and cost effective animal health program which will significantly reduce the pathogenic and disease characteristics of production units. This program utilizes sound scientific information, practical thinking and realistic market-oriented procedures to enhance the safety and value of products delivered to the market place. The program uses best management practices combined with adherence to state and federal regulations, as well as requiring compliance of label instructions for vaccine and medications.

Aquaculture

In August 1999, the Department submitted a protocol to USDA to gain certification to perform export regulatory testing on catfish, clams and shrimp. Both Kissimmee and Live Oak laboratories are part of the certification. The protocol was accepted by USDA, making the Department's laboratory system the only such certified system in the state.

Funding

The Department received $607,595 in OCO funds for replacement equipment in the laboratories.

Live Oak

Live Oak has become the focal point for the new Johne's Disease control program in Florida. Last year, the Department performed more than 30,000 tests for Johne's disease, and the vast majority were conducted at the Live Oak laboratory. Live Oak is now equipped with new computer capabilities, having received extensive wiring throughout the building, a concentrator and desktop computers.

Feed, Seed and Fertilizer

The Department is responsible for the collection and analysis of seed and fertilizer samples to determine compliance with state standards and label guarantees, and to conduct a certification program for feed laboratories. It performs establishment inspections, collects samples for analysis and issues enforcement actions. It also performs analyses on regulatory samples submitted by inspectors throughout the state. The Department maintains a leadership role in determining compliance of regulated businesses with existing laws and demonstrates adaptability to an ever-changing agricultural and consumer environment. The Department is staffed with highly trained, professional personnel and utilizes the most advanced technology available. This combination ensures quality analytical results while maximizing efficiency and productivity. The objectives of these programs have remained the same through the years: to ensure that consumers receive quality products, to provide a level playing field for all manufacturers and to promote environmental stewardship. Additional information may be obtained by visiting the bureau's web site at http://doacs.state.fl.us/~aes-fsflab/.

Feed

Animal feeds, except for pet food, are regulated through the laboratory analysis of samples by government certified labs. Registrants, including ingredient suppliers, are required to submit samples of their products to Department-certified laboratories for testing. Results from these sample analyses are reported to the State Feed Laboratory where compliance with Chapter 580, F.S. is determined. Appropriate regulatory action is taken by the Department. Five certified laboratories and 428 feed companies are participating in the program. A total of 2,297 samples were submitted and analyzed, with 102 violations in one or more categories. This represents an overall violation rate of 4.4 percent. Limited inspection, sampling and laboratory evaluation oversight was conducted to verify compliance with the feed program. A feed workshop was also held to provide program information to feed registrants. Seven consumer complaints or requests were investigated, and 40 administrative fines were levied totaling $150,138. The administrative fine process was under review during this fiscal year. The 1999-2000 administrative fines will be assessed and collected in fiscal year 2000-2001.

Seed

The seed program is administered to ensure that Florida consumers have a source of high-quality, genetically pure seed. Samples of agricultural, vegetable and flower seed are collected and analyzed for purity, germination and compliance with Chapter 578, F.S. Commercial seed samples are tested on a fee basis to determine seed quality or accurate labeling information. During the fiscal year, 1,913 seed dealer licenses were issued, and 3,937 official seed samples were collected. Laboratory personnel analyzed 4,120 official and commercial seed samples, requiring 34,462 determinations. They determined that 14.3 percent of the samples were mislabeled and 3.6 percent were illegal.

The Seed Investigation and Conciliation Council serves to assist farmers and agricultural seed dealers in determining the validity of complaints made by farmers against dealers and to recommend cost damages resulting from the alleged failure of the seed to produce as represented by the label on the seed package. This council conducted hearings involving six complaints from growers alleging that seed was defective when purchased, resulting in estimated losses of more than $85,000.

Fertilizers

The fertilizer program is considered to be one of the most innovative programs in the nation. Official samples of commercial fertilizer and agricultural liming materials are collected and analyzed to ensure that they meet the standards set in Chapter 576, F.S. This program provides a model for new fertilizer analytical methodologies. The laboratory has developed and implemented new methodologies to accommodate evolving needs in the areas of nutrient availability in controlled release fertilizers and micro-nutrient solubility.

Emerging issues such as heavy metals in fertilizers and nutrient best management practices are also administered under this program. The Fertilizer Material Assessment Advisory Group scientifically evaluates all new fertilizer materials before they are allowed into the Florida marketplace. Two new materials were reviewed by this group during this fiscal year. The laboratory also analyzes commercial samples, on a fee basis, to determine compliance with label guarantees.

There were 7,173 fertilizer samples analyzed during this fiscal year, of which 1,646 were found to be deficient in one or more plant nutrients. The laboratory performed 142,135 determinations on these samples. The overall deficiency rate was 22.9 percent. As a result of excessive deficiencies, 36 licensees were placed on probation, and penalties and fines totaling $378,675 were levied, with $306,440 of that total returned to consumers. There were 487 licenses issued for the sale of fertilizer in Florida. Additionally, 1,728 brands and grades of speciality fertilizers were approved for distribution. Nearly 2.5 million tons of mixed fertilizer and fertilizer materials were reported for the state.

Agricultural Law Enforcement

Investigative Services

The Department works closely with the agriculture industry, investigating criminal cases that involve timber, citrus, wildfire arson, livestock, equipment theft and aquaculture crimes. It also coordinates with the USDA in the Florida Interdiction Smuggling Team (FIST). This team inspects maritime freight and cargo passing through shipping ports and airports in Florida as well as the international mail center at Miami International Airport. In addition, the Department takes a proactive role in the prevention of wildfires and other agricultural crimes through education and training. By working with the citrus industry, the Cattleman's Association and other entities, the Department assists in the statewide efforts to reduce the number of agricultural crimes.

In fiscal year 1999-2000, the Department opened 1,846 criminal investigations in the following categories:

1.	Fire investigations	1,497
2.	Farm equipment investigations	21
3.	Livestock investigations	56
4.	Timber theft investigations	48
5.	State lands investigations	94
6.	Consumer crimes investigations	47
7.	Citrus theft/fraud investigations	12
8.	Farm products investigations	7
9.	Pest Control investigations	1
10.	Miscellaneous investigations	63
	TOTAL	1,846

The Department receives hundreds of complaints regarding fraudulent activity in telemarketing, solicitations of charitable contributions, motor vehicle repair, business opportunities, health studios and sellers of travel. As millions of dollars are fraudulently taken from Florida citizens, more and more Department resources are being channeled into the investigation of these types of crimes.

Florida has more than 17,000 registered auto repair shops. The Department continually monitors the complaints on repair shops, initiates criminal investigations and conducts sting operations on suspected fraudulent repair practices. This has resulted in a number of arrests for criminal violations and the closing of repair shops that were found to be defrauding the consumer.

The Department launched a statewide investigation into the use of automobile after-market crash parts. During the course of this investigation, several body shops were identified as committing fraud on consumers and insurance companies. In some cases, consumers were exposed to dangerous hazards. It was discovered that some body shops were using substandard replacement parts, including such flagrant violations as not replacing air bags. As a result of this initiative, the use of after-market parts will be scrutinized much more closely, and a better certification process will be implemented.

The Department participated in a federal/state investigation of telemarketing rooms in South Florida, closing a number of illegal currency exchange operations that were responsible for scamming millions of dollars from citizens. Several arrests were made as a result of the investigation which was conducted by the South Florida Federal/State Telemarketing Task Force. The Department has maintained a prominent role in that task force since July 1997. The Department also participates in a number of task forces and associations that investigate consumer fraud.

The Department also patrols more than 400,000 acres of state lands and forests, providing police protection and investigating crimes regarding wild fire arson, vandalism, violent disturbances and missing persons. The past fiscal year, investigators expended 6,345 man-hours patrolling and protecting state lands and forests and logged a total of 520,629 miles. This presence also acts as a deterrent to these and other violations that occur on state lands.

Uniform Services

The Department operates 22 agricultural inspection stations located on every paved highway crossing the natural boundary of the Suwannee and St. Mary's rivers. Agricultural vehicle inspections are conducted at each location around the clock, 365 days a year, by 177 law enforcement personnel and a support staff of six individuals.

These Department officers support and supplement all of the Department's regulatory and law enforcement programs by conducting inspections of highway shipments of agricultural, horticultural and livestock commodities. These regulations and programs ensure compliance with Federal-State Marketing Agreements and various laws, rules and regulations implemented to ensure the consuming public a quality food product and/or prevent, control and eradicate specific plant and animal pests and diseases that could economically devastate segments of Florida's $7 billion agricultural industry.

The Department also cooperates with federal, state and local government agencies on projects, both criminal and non-criminal, which either improve the efficiency of various agricultural programs or generate additional revenues to the state without increasing costs to Florida's citizens. During times of natural disasters, these Department officers, as members of Florida's Emergency Response Team, participate in relief efforts ensuring that the devastated areas receive adequate law enforcement protection so affected communities can quickly return to normal.

During fiscal year 1999-2000, Department officers conducted 10,330,927 vehicle inspections leading to detection of 3,465 violations involving 774 arrests, 382 warnings and 2,309 administrative actions. Additionally, officers expended 1,056 man hours on state forest patrol, consumer fraud investigations, aquaculture protection and State Fair protection, as well as 4,179 man hours in relief of emergency situations created by citrus canker eradication and statewide wildfires.

Department officers also collected and provided the Department of Revenue 67,139 bills of lading pertaining to certain types of cargo entering Florida, resulting in an additional $10,948,849 in sales and use taxes being collected by the state during fiscal year 1999-2000 that would have otherwise gone uncollected. This cooperative effort not only greatly enhances the state's ability to collect sales and use taxes but also precludes out-of-state contractors and businesses from gaining an unfair competitive advantage over Florida entrepreneurs. Since the inception of the program in April 1993, this cooperative effort has resulted in the detection and collection of more than $79 million in unpaid taxes.

In addition to the above mentioned duties, the Office of Agricultural Law Enforcement, Uniformed Operations section supported the Citrus Canker Eradication Program (CCEP). This Department program, in cooperation with the USDA, is responsible for surveying, mapping and eradicating to date over 1 million properties with citrus trees identified as being infected with or exposed to the citrus canker bacteria. Department officers provide law enforcement support for hundreds of Department employees. The Department also supervises more than 50 contract law enforcement officers in these counties to support this massive effort in protection of Florida's citrus industry and future. Department and contract officers have successfully resolved hundreds of consumer-related matters regarding the removal of infected and exposed trees.

Plant Protection, Inspection and Certification

Special Programs

Citrus Canker Eradication Program (CCEP) (as of October 31, 2000)

Florida is currently fighting Asian strain bacterial citrus canker in seven counties: Dade, Broward, Palm Beach, Manatee, Hillsborough, Collier and Hendry. In all areas where canker is present, diseased trees are confirmed positively infected by on-site plant pathologists. In areas where the disease is detected for the first time, a sample is sent to the lab in Gainesville for further verification. The movement of citrus plant material from quarantine areas is prohibited, though citrus fruit may move under certain conditions when certified by the Department. In January 2000, the CCEP began 1,900-foot removal of exposed trees, which captures the bacteria spread 95% of the time and is based on a year-long epidemiological study in Miami-Dade and Broward counties. On February 11,

2000, Governor Bush declared a state of emergency for canker-infected counties and allocated additional funding for eradication; funds have also been allocated for a statewide citrus canker survey which is underway. Mandatory statewide decontamination procedures began April 1, 2000.

TOTAL trees destroyed to date statewide: residential 543,238 + grove 818,845 = 1,362,083.

Dade and Broward Counties

Quarantine area: approximately 1,000 square miles

Citrus canker was detected in the Westchester/Sweetwater areas of Dade County in October 1995. It has now spread into 343 sections in Dade and 218 in Broward. Since October 1995, control action has been taken on approximately 126,172 properties. A total of 535,868 infected and exposed trees in 561 sections and six government lots have been removed to date. Also, on January 5, 2000, canker was found in commercial lime groves in Florida City; a total of 265,915 trees on 1,905 acres have been pushed and burned to date.

Palm Beach County

No quarantine area

Citrus canker has been detected on 60 residential properties across six sections since the first find in November 1999. CCEP scientists are investigating why the majority of infected trees have been key limes; a unique strain of canker is expected. Survey is ongoing and approximately 1,864 trees have been destroyed to date, though control action will remain limited until a conclusive determination is made about the strain.

Manatee County

Quarantine areas: Palmetto, 95 square miles and Duette, 41 square miles

Citrus canker was detected in May 1997 in two groves off Interstate-75 near Palmetto. A total of 850 acres have been found positive for canker: 738 commercial and 112 abandoned acres. To date 90,545 trees on 1,287 infected acres have been pushed and burned; 2,975 dooryard trees have been destroyed. In July 1999, 38 positive trees were found about four miles west of Duette and burned in place; seven exposed acres were also destroyed. Additional positive and exposed trees were detected and destroyed in September and December 1999 and February 2000.

Hillsborough County

Quarantine area: 20 square miles

Citrus canker was detected in November 1999 in the Sun City Center area of southern Hillsborough County. Survey revealed a total of 56 positive and 46 exposed trees on 27 properties across four square miles. Control action on positive and exposed trees is complete – 2,139 dooryard trees have been destroyed on 947 residential properties. In December 1999, 8,500 grove trees on 102 high-risk abandoned acres just across the county line were destroyed; 1,766 additional grove trees were destroyed in August 2000 for a total of 10,266 trees on 117 acres.

Collier County

Quarantine areas: Sunniland, 77 square miles; Golden Gate City, 9.5 square miles

In June 1998 citrus canker was detected in Collier County in the Indian Lake Grove, 12 miles southeast of Immokalee. Since then, 767 acres have been destroyed on four additional infected groves west of Indian Lake. To date, 10 residences in Golden Gate City have infected trees – 21 positive and 1,268 exposed trees have been destroyed onsite since the first find in April 2000; 1900-foot control action is complete. Also, two residences at Golden Gate Estates have had five positive and 18 exposed trees destroyed.

Hendry County

Quarantine areas: Siboney, 95 square miles; Big Cypress Seminole, 18 square miles; Montura Ranch, 16 square miles; Star-Glo, 30 square miles (portions in northern Collier County)

In February 1999 canker was found in the Siboney Grove; the entire 622-acre grove has been destroyed. Since then, approximately 930 acres have been pushed on five additional infected groves in the area. All of these groves are on the east and south outer fringe of the southwest Florida citrus area, and the Siboney quarantine area has been expanded 11 square miles to incorporate these finds. To date, seven residences at Montura Ranch Estates have infected trees – 39 positive and 900 exposed trees have been destroyed, and the last find was on a single Key Lime tree on August 29, 2000. In late July/August 2000, 132 positive trees were confirmed and burned in place in the Ruby Red Equities grove just west of the Star-Glo quarantine area; the quarantine area has been expanded an additional five square miles. On October 31, 2000, 33 positive trees were detected in a previously-positive grove inside the Star-Glo quarantine area; control action is pending risk assessment. The Immokalee CCEP Office combined total for Collier and Hendry counties is 452,119 grove trees removed on approximately 3,350 commercial acres (including 360 abandoned acres), with 2,250 residential trees cut to date.

DNA Analysis

Current scientific research indicates that all citrus canker outbreaks in Florida (which have received molecular analysis) are genetically related to the Dade County infestation, except for infestations in Palmetto (Manatee County) and parts of Sun City Center (Hillsborough County), which are an apparent reoccurrence of the 1986-94 outbreak.

Other Programs

The Citrus Budwood Protection Program

Budwood protection plays a vital part in preventing the establishment of new, and spread of existing, diseases in Florida's commercial citrus industry. The threat of new pathogens to Florida's growers is ongoing with increased travel and emigration from abroad. Because of the ease of transmitting pathogens by grafting, the Department regulates the movement of budwood from source trees to nurseries. Citrus tristeza virus is monitored in all budwood source trees. Registered scion grove trees receive additional viroid testing, while parent trees are the most thoroughly tested for graft-transmissible pathogens. Movement of citrus germplasm into Florida is prohibited without permit. New germplasm introductions into Florida are quarantined and strictly indexed in the Department's facilities in Gainesville.

Nursery propagations have varied very little over the past four years. There were 5.8 million

propagations in 1999-2000 compared to 5.9 million in 1998-1999. This is enough trees to plant 46,000 acres at an average of 125 trees per acre. Since the budwood program began in 1953, enough registered trees have been budded to replant the entire commercial citrus acreage in the state.

Sweet oranges are the principal citrus type grown in Florida, representing 85 percent of the citrus being produced, with 53 percent of these sweet oranges propagated being Valencias.

Twenty-five different rootstocks were used in Florida citrus nurseries in 1999-2000. Five rootstocks account for 88 percent of registered nursery propagations.

There are a total of 108 commercial citrus nurseries in Florida of which 20 are strictly own-use. Seventy-five of the commercial and own-use nurseries were active in fiscal year 1999-2000. The majority of the citrus nurseries are located in Central Florida, with Polk and Highlands counties number one and two respectively.

Foundation Groves

Foundation trees are maintained by the Department for horticultural evaluation or budwood and/or seed distribution. The Budwood Foundation trees at Winter Haven and Dundee are intended to supply small quantities of budwood for the establishment of scion and increase trees at participants' nurseries. The Department cut and distributed more than 200,000 budeyes from foundation trees this past year.

The Dundee Foundation Grove is planted with 337 different commercial citrus clones representing 113 different varieties. There are 98 clones of Valencia represented at Dundee. The Foundation Grove uses 68 different rootstocks to evaluate scion/stock combinations.

The Florida Citrus Arboretum

The Florida Citrus Arboretum is one of the largest collections of citrus germplasm in the world, with 432 trees representing 256 different varieties. This year the Arboretum celebrated its 25th anniversary. Commercial citrus as well as citrus relatives and hybrids are available for researchers, FFA groups, college students and tourists to observe, evaluate and taste; 569 visitors came this year from nine different countries. The Arboretum supplied over 40,000 budeyes to nursery owners this fiscal year and exported 3,115 budeyes out of state.

Immokalee Screenhouse

A screenhouse constructed in 1998 is the future of the budwood supply from the Southwest Florida Immokalee Foundation grove. This fiscal year the screenhouse expanded from 12,672 square feet to 25,344 square feet, doubling the tree capacity. The first budwood was cut from the screenhouse this year as 14,660 budeyes were distributed to nursery owners. Construction of an additional screenhouse is planned at this location during the next fiscal year.

Biological Greenhouse Viroid Testing

The Department completed a total of 874 biological greenhouse tests to detect viroids this fiscal year.

Citrus Tristeza Virus Tests

Fiscal year 1999-2000 was the fourth year for reporting annual citrus tristeza virus test results from source trees. This year there was a continuing rise of severe and mild strains in some partici-

pating scion groves, with an 8.9 percent severe tristeza infection rate in scion trees compared to 5.9 percent last year.

Shoot-Tip Grafting

Shoot-Tip Grafting (STG) is used to remove viruses and viroids from infected parent trees. This fiscal year, 130 STGs representing 23 different candidates were transferred from the laboratory to the greenhouse. These will be thoroughly tested before receiving a fruit check and being released; 187 tests were completed on propagated STGs this year.

Plant Inspection and Certification

In fiscal year 1999-2000, 6,893 nurseries and 3,205 stock dealer establishments registered with the Department. Inspectors made 15,262 inspections of nurseries and stock dealers. There were 19,778 state and federal certificates issued for shipments of plants and plant products exported from Florida; 424,800 plants were quarantined.

Department personnel also inspected shipments of plants and plant products imported into Florida from other states and countries, including 30,634 boxes of cut plant material, almost 842,411 commercial and home grown plants and 110,850 boxes of citrus and other fruit. These inspections resulted in regulatory action for five plant pests of quarantine significance.

Over 18,611 samples were collected to check specifically for burrowing nematodes per the requirements of the burrowing nematode certification program.

Department personnel tended 132 gypsy moth traps in North Florida, with no reproducing gypsy moth infestations detected. Other seasonal traps included three cotton boll weevil traps, no exotic insect traps targeted for false coddling moth, Egyptian cotton leafworm and rice cutworm, and 26 European corn borer insect traps.

Department and USDA personnel tended more than 24,596 traps for exotic fruit fly detection.

Caribbean Fruit Fly-Free Protocol

The Caribbean fruit fly is a serious pest of many tropical and subtropical fruits of central and south Florida. The Fly-Free Zone Certification Protocol was developed to certify citrus fruit as free of Caribbean fruit fly larvae. Bermuda, Japan, California, Hawaii, Texas, Brazil, Colombia, New Zealand and Thailand have accepted this certification procedure, which is fully funded by grower assessments. Fruit shipped to these areas must originate in specific Caribbean fruit fly-controlled or designated areas in citrus-producing counties approved for shipment of fruit.

In the 1999-2000 season, 184,020 acres were certified in 21 eligible counties. The Caribfly Protocol establishes a safe and effective procedure for exporting citrus to areas requiring quarantine safeguards. Japan is currently the largest importer of fresh Florida grapefruit; 10,873,703 cartons of grapefruit were shipped to Japan under the protocol certification program this season.

Boll Weevil Eradication

At the close of the 1999 cotton growing season, there were 362 commercial cotton growers in the state. These growers planted 106,121 acres of cotton in 14 counties, an increase over the 1998 growing season of 214 acres of planted cotton. As a result of the grower-funded Boll Weevil Eradication Program, the state continues to remain boll weevil free.

Pest Detection/Plant Inspection

During the past year, one interception of the European brown garden snail (Helix aspersa) was made by Department plant protection specialists. This interception occurred on nursery stock from California.

Pea leaf miner

Liriomyza huidobrensis, pea leaf miner, is a highly polyphagous and serious pest of various vegetable and flower crops including lettuce, onion, pepper, potato, chrysanthemum, carnation and many others. The original distribution of this pest is thought to be in cool, highland areas of northwestern South America, but it has spread widely into Central America, Mexico, California, Europe and Israel. Between July 1, 1999 and June 30, 2000, out of the seven samples taken from commodities from California and Mexico, two samples were positive for pea leaf miner. Department personnel inspected a total of 1,887 boxes of commodities. Of these 1,605 were positive for pea leaf miner.

Apiary Pest Treatments

Following the Section 18 Exemption registration of coumaphos in January 1999, Florida beekeepers have been able to get Varroa jacobsoni Oudeman, varroa mites and Aethina tumida Murray, the small hive beetle, under control. Although accurate statistics are not available, reports of losses from both of these pests this fiscal year are less than 100. A comparison to last fiscal year's losses of over 50,000 is indicative of the effectiveness of coumaphos.

American Foulbrood

Several severe outbreaks of American Foulbrood (AFB) that is resistant to Terramycin have occurred in this fiscal year. The Department is assisting the USDA Agricultural Research Service (ARS), in research on two antibiotics for potential use in treating this disease.

African Honeybee

Two swarms of African bees have been detected in this fiscal year, one from the port of Jacksonville and one from Tampa. This is three fewer than the previous period. This reduction seems to be the result of the increased education of ships' crews and dock workers conducted by the USDA, especially including those involved with shipping from Puerto Rico.

In the fiscal year 1999-2000, of the 257,997 honeybee colonies maintained by registered beekeepers there were 63,618 colonies inspected from 3,485 apiaries. Compensation of $30,625 was paid to beekeepers for the 1,663 honeybee colonies destroyed because of infestations of American Foulbrood disease. This was a considerable increase from several previous fiscal years. During this time there were 103,827 colonies in 294 loads that moved into Florida from 18 different states and 102,655 colonies in 299 loads that moved out of state. This was a slight reduction from the previous fiscal year.

Methods Development and Biological Control Projects

Diaprepes Root Weevil

Diaprepes root weevil, a serious long term pest of citrus and other agronomic crops of Florida, has continued to be of major concern for many citrus growers. Presently, there are approximately 45,000 acres of citrus in twenty citrus-producing counties infested with this pest. Scientists believe that an IPM program, including biological control, is the best solution. The Department has cooperated with U.S. Sugar corporation, UF-IFAS, USDA and Kerr Center in the introduction, rearing and release of Quadrastichus haitiensis, an egg parasite of D. abbreviatus. This parasite was imported into Florida on November 12, 1998, from Puerto Rico. During the past year the Department reared about 500,000 Q. haitiensis and shipped them for release in Dade, Hendry, St. Lucie, Indian River and Polk counties. Q. haitiensis has been recovered from several locations in Dade and Hendry counties.

Ongoing cooperative research is also being conducted on the evaluation of selective pesticides for control of adult and immature life stages in nurseries; evaluation of a new pesticide for control of immature weevils for up to two years; exploring improvements to present methods for surveillance and detection techniques for nurseries and citrus groves and field studies on adult weevil dispersal, trap efficiency and adult weevil longevity. Genetic differentiation among six Florida populations of Diaprepes have been studied. These studies show significant differentiation between populations with the hypotheses of three independent introductions into Florida. Indications are that once introduced, Diaprepes root weevil has generally remained in one locality with limited dispersal to new areas. All research activities are in cooperation with the University of Florida, IFAS, Research and Education Centers located throughout the state. Additional investigations are being conducted with the USDA-ARS and APHIS.

Caribbean Fruit Fly Mass Rearing Facility

The Caribbean Fruit Fly (CFF) Mass Rearing Facility began mass rearing Diaprepes root weevils in February 2000. Previously USDA-ARS in Orlando had mass reared weevils to supply various life stages for their own use as well as providing insects for others scientists in the public or private sector doing research on this important agricultural pest of citrus and other commercial crops. Between February and June 2000, the CFF Mass Rearing Facility successfully reared Diaprepes through its complete life cycle and established a mass rearing protocol. Even with the weevils' highly variable developmental time from egg to adult, 74-153 days, some shipment requests were able to be met. Over 5,000 neonate larvae, 330 later instar larvae, 40 pupae and 464 adult weevils were supplied to seven different researchers. Now that a multi-stage colony has been established it should be possible to meet the continually increasing demand for various life states.

The Facility continued its production of Caribfly, rearing about 550 million this year or an average of about 10.6 million per week. Various life states were supplied to researchers as well as for the Department's use in alternative pesticide testing and automated release machine studies.

The parasitoid, Diachasmimorpha longicaudata, continues to be reared to maintain a colony for research projects.

Pink Hibiscus Mealybug/Papaya Mealybug

In preparation for the possible discovery of Pink Hibiscus Mealybug, Maconellicoccus hirsitus, in Florida, Striped Mealybug has been cultured in the Department's laboratory. This insect is used to rear a lady beetle, Cryptolaemus montrouzieri, a predator of M. hirsitus, which will be available when the pest arrives in Florida. Japanese Pumpkin was also grown in Gainesville to provide food for the Striped Mealybugs. Approximately 200 pounds of Japanese pumpkin were harvested in June and July of both 1999 and 2000.

Papaya Mealybug, Paracoccus marginatus, has spread to several counties in Florida, including Dade, Broward, Palm Beach and Manatee counties. In cooperation with USDA-APHIS-PPQ, three parasites of P. marginatus, Anagyrus sp., Apoanagyrus sp., and Acerophagus, have been approved for release in Florida to control this pest.

Asian Citrus Psyllid

Asian Citrus Psyllid, Diaphorina citri, was discovered in Florida on June 2, 1998 by Department personnel. It had spread to 12 counties in south and central Florida along the east coast by summer of 1999 and to 21 counties as of May 2000. It is one of the most efficient vectors of greening disease of citrus. If greening disease is found in Florida, this vector could spread it throughout the state. In cooperation with UF-IFAS, two parasites of D. citri, Diaphorencyrtus aligarhensis and Tamarixia radiata, were introduced in the Department's Quarantine laboratory October 21, 1998, and a permit for field release of T. radiata was granted on July 12, 1999, and for D. aligarhensis on March 10, 2000. Approximately 20,000 T. radiata and 4,000 D. aligarhensis were reared at the Department laboratory and University of Florida and released in Dade, Palm Beach, Martin, Okeechobee, St. Lucie, Indian River and Hendry counties. These parasites were found to be established in several citrus groves in those counties in September 2000.

Brown Citrus Aphid

The Brown Citrus Aphid, Toxoptera citricida, was detected in Broward and Dade counties in November 1995. At present the aphid has spread throughout the citrus growing region of Florida. It causes economic losses by feeding on young citrus foliage and depleting sap. This aphid is one of the most serious pests of citrus due to its transmission of citrus tristeza virus (CTV). Lipolexis scutellaris adults from Guam were imported into the quarantine laboratory of the Division on August 19, 1999, and a permit for release of this parasite was granted on June 21, 2000. Approximately 15,000 L. scutellaris reared at the Department laboratory and University of Florida were released in Dade, Palm Beach, St. Lucie, Indian River, Orange, Marion, Alachua and Hendry counties.

Giant Whitefly

Giant whitefly, Aleurodicus dugesii, a serious pest of hibiscus and ornamentals was first found in Florida in December 1966. It has since been detected in Seminole, Indian River, St. Lucie, Volusia, Polk, Hillsborough and Osceola counties. Two parasites – Entedononecremnus krauteri collected in San Diego, California, and Encarsia moyesi from Mexico – were released in Florida in 1997-98. Continued monitoring of these sites indicates that the parasites have been effective on most of the giant whiteflies that have been detected.

Citrus Leafminer

The Department has continued to rear and release the citrus leafminer parasite, Ageniaspis citricola, especially in the areas that are infested with citrus canker in Miami and Immokalee. This parasite has been established in citrus growing areas in Florida and should continue to be released at outbreaks in late spring to prevent the build up of citrus leafminer in the summer in Florida citrus.

Citrus Blackfly/ Silverleaf Whitefly

The Department maintains a colony of citrus blackfly, Amitus hesperidum and Encarsia opulenta, for release at isolated outbreaks in Florida. In April, A. hesperidum was sent to Trinidad to control citrus blackfly that was recently discovered in that country.

Eretmocerus sp (HK), a parasite of Silver Leaf Whitefly continues to be reared and released in limited locations in Florida.

Pepper Weevil

The pepper weevil, Anthonomus eugenii, is a serious pest of peppers and other vegetables in Florida. In cooperation with University of Florida, IFAS, an attempt at introduction of Triaspis sp, a Braconid parasite of Pepper Weevil from Mexico into Florida was made in April 2000. Rearing attempts have failed but efforts will be made to reintroduce this parasite again in the future.

Alternative Pesticide Research

Following initial tests in the fall of 1998 and spring of 1999, two additional tests using a Spinosad/solbait material were compared to the standard malathion/Nulure bait spray. Aerial application and ground applied foliar spot sprays of Spinosad/solbait were equal to malathion/ Nulure for control of sterile Caribbean and/or Mediterranean fruit flies compared to a check of bait only or a no treatment control.

In the first trial date for the fall 1999 test, there was a 98 percent and 96 percent reduction in the released Medfly population using malathion and Spinosad respectively. At the second trial date, the population was reduced by 80 percent and 84 percent by malathion and Spinosad respectively.

Additional research is also being conducted on alternative materials to replace diazinon as a fruit fly soil drench and to develop effective and appropriate application techniques for this usage. Development continues on field and laboratory simulated bioassay systems for selective pesticides. Selected baits used for fruit fly control are being evaluated for attractiveness and consumption.

Oriental Fruit Fly Eradication Program

Following the discovery of four Oriental fruit flies in Tampa, control activities were initiated on May 21, 1999. Department personnel actively participated in the control phase in which a total of 52,263 bait stations (spot treatments) were applied over two treatment areas totaling 97.2 cumulative square miles. A total of 16 Bactrocera spp. were detected in two counties. The last treatment was completed on August 26, 1999, control activities were completed on August 27, 1999, and the quarantine restrictions were lifted on September 30, 1999.

Medfly Eclosion/Release Facility for SIT/PRP

As part of the Preventative Release Program (PRP), aerial releases of sterile Mediterranean fruit flies, Ceratitis capitata, at a rate of 125,000 per square mile, continue in three areas in west central and south Florida (Hillsborough, Sarasota, Manatee and Dade counties). In July 1999, these three release areas contained about 700 square miles. In August 1999, a small area between the Alafia River and the Manatee County line, containing approximately 174 square miles, was dropped from the PRP release area, reducing the total area to 459 square miles. In response to the detection of a wild female Medfly near downtown Sarasota, 33 square miles of additional PRP coverage was added to the eastern edge of the existing area in Sarasota County in December, increasing the PRP area to its current 492 square miles. Also, the total of incoming pupae was increased from 75 million to 85 million per week.

On March 27, 2000, in cooperation with USDA, the first tests of the eclosion tower prototypes were initiated. These tests ran for 16 weeks and ended in May. A second set of tests began in June and ran for 10 weeks.

Also in March, an employee was permanently assigned to represent the Department in the operation of the facility in cooperation with the USDA SIT Director.

Florida Accelerator Services and Technology

The replacement linear accelerator installation was completed and final acceptance signed in November 1999. Commercial irradiation services began during the first month after acceptance and service invoices totaled $23,495 through June 30, 2000. Currently semiconductors are the primary commercial product processed. An X-ray target was added to the linear accelerator and used to irradiate over 18 million Caribbean fruit fly pupae for research studies. The Cesium-137 irradiation source was used to irradiate five million Caribbean fruit fly larvae and pupae for research purposes. Also, this source was used to irradiate insect diet, plants, seeds and other products on a contract or research basis.

Automated Ground Release Equipment

A test comparing the quality and distribution of Caribbean fruit flies between an automated ground release, truck mounted equipment and a static release technique was initiated on June 5, 2000, and will continue into the next fiscal year. Data will be evaluated using standard statistical methods as well as spatial analysis. Acceptable results will allow sterile flies to be released in areas inaccessible by aerial release and provide a higher release rate in areas of high risk during eradication programs. A similar test using sterile Mediterranean fruit flies is anticipated for the fall of 2000.

Training and Compliance/Fumigation

Department personnel continued to provide training and testing for employees for Restricted Use Pesticide (RUP) Licenses; to coordinate applications for CEUs for those licenses and to provide record keeping for Right-To-Know and Material Safety Data Sheets (MSDS) files. Fumigation of specimens, books, reprints, etc., for the Florida State Collection of Arthropods continued at the Gainesville fumigation chamber. Annual evaluations and certifications of methyl bromide fumigation chambers used for blueberry fumigation were conducted this period.

Post-harvest fumigation at Wahneta

Shipments of fresh Florida produce are fumigated with methyl bromide at the Wahneta fumigation facility in order to satisfy certification requirements of important domestic and foreign markets. California, Hawaii, Texas and Japan require fumigation of citrus fruit not qualifying under Caribbean Fly-free Zone Certification Protocol. All citrus fruit being shipped to Arizona must be fumigated.

During fiscal year 1999-2000, the Wahneta fumigation facility fumigated and certified a total of 213 truckloads of citrus containing 213,844 cartons of citrus, seven truck loads of blueberries (4,999 flats) and two truckloads of Spanish moss (1,532 cartons and 700 bags).

Winter Haven automotive maintenance shop

The Department's Winter Haven Maintenance Facility provided maintenance as well as technical support for the emergency and ongoing programs for Citrus Canker, Medfly, Oriental Fruit Fly and the Fruit Fly Protocol, as well as for the Agriculture Law Enforcement Unit, Division of Fruit and Vegetables, Division of Citrus Budwood Registration and Gainesville bureaus of Administration and Plant Inspection. Shop personnel participated in ground and aerial spray operations for research. The Department furnished storage and transportation of supplies and equipment for eradication programs and assisted in purchasing. This fiscal year the Department completed 800 repair work orders on vehicles and equipment and installed decontamination and safety equipment to nearly 500 new vehicles, mostly associated with the Citrus Canker Eradication Program.

Entomology, Nematology, and Plant Pathology

Entomology

For fiscal year 1999-2000, the Department processed 5,047 samples totaling 121,787 individual specimens. During that same period, 11 exotic species were found apparently established within the state.

Nematology

In fiscal year 1999-2000, the Department analyzed 19,087 soil and root samples. More than 171,000 specimens were examined. Also, three nematode species were recorded for the first time in Florida.

Plant Pathology

For fiscal year 1999-2000, the Department processed 3,153 samples in the plant problem clinic and also made 393,411 diagnoses for citrus canker for the statewide Citrus Canker Eradication Program. In addition, five new state records (including two U.S. records) were established this period.

Botany

For fiscal year 1999-2000, the Department processed 3,967 botany samples.

Fruit Fly Identification Laboratory

Department and USDA inspectors together service approximately 50,000 traps statewide. Of these traps, the Fruit Fly Identification Laboratory processed 201,106 different fruit fly detection traps and screened about 1,649,546 sterile Medflies and wild Caribflies.

During this period, four exotic fruit fly introductions occurred: 17 Oriental fruit flies near Tampa, two Guava fruit flies in the Mims/Titusville area, one Medfly in Sarasota and one Oriental fruit fly in Bradenton. Through early detection and control efforts the Oriental fruit fly and guava flies did not become established but were declared eradicated. The Medfly and Oriental flies found in Manatee and Sarasota counties were single finds.

Advanced Diagnostics Laboratory

For fiscal year 1999-2000, the Advanced Diagnostics Laboratory conducted diagnostic tests on 148 molecular samples (citrus greening, citrus canker, Africanized honeybee, Medfly and imported fire ant certification). More than 100 developmental, calibration and optimization tests were also performed.

Florida State Collection of Arthropods

For fiscal year 1999-2000, donations to the Florida State Collection of Arthropods totaled 144,708 specimens from 49 donors, bringing the total number of specimens to more than eight million. Also in that time period, 15 guided tours were given at the FSCA, with 250 participants. In addition, 78 other visitors came to study the collection, the sixth-largest collection in the United States and the largest in the south.

PROMOTING FLORIDA AGRICULTURE

"Fresh from Florida" Magazine

A new feature of the Florida Agricultural Promotional Campaign (FAPC) is the "Fresh from Florida" magazine. This high-gloss full-color publication promotes Florida's agricultural industry through FAPC member feature articles, Department promotions, industry sponsored events and seasonal articles on specific commodities. Published four times a year, "Fresh from Florida" is distributed through a mailing list of FAPC members, select national and international buyers of agriculture products and other agribusiness industry professionals. Each issue is also distributed at national and international trade and industry-sponsored events throughout the year.

Equine Industry

The Department and the Florida Thoroughbred Breeders' and Owners' Association (FTBOA) are working diligently to increase awareness of Florida's thoroughbred industry nationally and throughout the state. In fiscal year 1999-2000, the Department and the FTBOA implemented an aggressive marketing and advertising campaign, targeting direct mail-outs, various trade publications advertisements, outdoor advertising (billboards, posters and mall kiosks), television and trade show exhibits.

In 1999-2000 the Thoroughbred campaign produced 202,489,611 consumer impressions with an advertising value of $163,594. The Thoroughbred campaign appeared in seven different trade publications producing over 5,700,000 impressions. Outdoor advertisements including billboards and mall kiosks, were used to promote the equine industry creating over 128,296,000 impressions. The campaign also used television public service announcements throughout the state on various major cable networks yielding results of 128,100,000 impressions.

The Department also used trade shows as a venue for the promotion of the equine industry. The Department participated in Equitana, USA in Louisville, Kentucky. This industry event is often billed as the "World's Fair of the Horse" and was attended by more than 70,000 visitors. The multi-media display developed by the Department encouraged horse enthusiasts to relocate their facilities to Florida.

Florida Watermelon Display Contest

Memorial Day 2000 was the kick-off for a week long watermelon display contest in the major supermarket chains in Florida. The Department participated jointly with the Florida Watermelon Association in promoting fresh Florida watermelons throughout the state. Prizes of $2,000 for first place winners and $1,000 for second place winners were awarded to grocery store produce managers of each participating supermarket division in the state for the most creative and effective watermelon displays.

Florida supermarkets stocked up on watermelons in May and June in anticipation of the increased sales the contest would produce. As a direct result of the contest, the Federal State Market News Bureau in Orlando reported that the Florida watermelon industry experienced a sales increase of 17 percent over 1999.

Liquid Propane Gas Campaign

The Department has teamed with Florida's Liquid Propane Gas Association to produce an LP gas consumer campaign. This multi-media campaign, which includes television spots, trade publication advertisements, print material and an LPgas trailer will educate the public on the benefits of propane gas.

Promotion of this campaign has already begun in several regions of the state. Two different television commercials produced by the Department have run 22,325 times, and print advertisements have run in several trade publications. During the months of May and June, ads were placed in Florida Manufactured Homes, Florida Living, Florida Home Builders, Florida Pool Pro and Florida Manufactured Housing Association. The combined total circulation from the five publications during these two months was 295,800.

The trailer began a schedule of industry and consumer trade shows, expos and conventions to generate consumer awareness for LP gas. It premiered in September 2000 at the Home Builder's Expo in Pensacola followed by the October Construction Expo in Tallahassee and the Florida Manufactured Housing Association meeting in Orlando. The trailer will travel to the Florida State Fair in Tampa as well as a Regional Pool and Spa Expo in Orlando. The trailer is towed by an LP gas-powered Ford Expedition. It will also be available for various shows, conventions and for use by individual LP gas companies throughout the state.

"Florida Sun Fresh" Promotion

The Florida Tomato Committee requested marketing assistance from the Department in conducting an annual tomato campaign. Participation at 243 Publix Stores and 55 Super Wal-Mart Stores guaranteed the success of the "Florida Sun Fresh" marketing campaign, which ran from April 8 to May 6, 2000. A logo based upon the Department's highly recognizable "Fresh from Florida" logo was developed, produced and distributed on 1.2 million individual tomatoes and 1.5 million packaged tomatoes.

Publix conducted a retail display contest targeted at produce managers, while Super Wal-Mart gave away four $2,500 vacations to consumers in the "Pick a Florida Tomato and Pick a Florida Vacation" contest. The "Florida Sun Fresh" campaign has generated more than 136,350,000 consumer impressions and impacted Florida tomato prices during the promotion. The campaign was very successful and will be repeated next year on an even larger scale.

"Red, White and Blue" Promotions

For the third and final year, the Department teamed with the Southern United States Trade Association to promote southern produce including sweet potatoes, sweet corn, strawberries and blueberries in the United Kingdom. The UK retailer Tesco participated in the "Red, White and Blue" promotion, which ran March through May 2000.

Barker cards, recipe cards, promotional labels and point-of-purchase materials were developed for use in Tesco stores. In addition, 40 Tesco stores provided shoppers with samples of fresh produce from the southern United States. These promotional activities were responsible for substantial increases in sales of these products.

The promotion was especially successful for sweet corn, where a new market has been developed for the product, and hundreds of container loads are now being shipped into the region. The Department will continue to create consumer awareness of fresh products from the United States as the promotion is expanded into Germany.

This was also the third straight year for the successful "Red, White and Blue for Your Barbecue" statewide promotion featuring three of Florida's springtime crops -- watermelons, sweet corn and blueberries. Point-of-purchase materials were placed in major Florida retail supermarket chains in mid-May. Quarter-page, full-color ads appeared in major newspapers throughout the state on May 25, 2000. The circulation figures for the newspapers used in this promotion exceeded 1,868,000 and generated 4,296,400 consumer impressions. This special promotion advanced the

Florida Agricultural Promotional Campaign, by helping consumers identify Florida agricultural products at retail stores. Those participating in the program are authorized to use the distinctive "Fresh from Florida" logo to identify Florida products.

Kosherfest 99

Kosherfest '99 was held at the Meadowlands Exposition Center in Secaucus, New Jersey November 9-10, 1999. It is estimated that Kosherfest '99 attracted 12,000 buyers from 42 states and 21 nations. This event has grown from 69 exhibitors in 1992 to its current capacity of nearly 500. The Department designed a "Kosher From Florida Deli" to represent Florida Kosher Certified Companies.

The participating companies sent products to Kosherfest and were required to show proof of certification. Representatives of the Department worked to develop leads for the participants. The Department's marketing director participated in a round table discussion during the exhibition to share the state's efforts to promote Kosher products.

ANUGA 99

ANUGA '99 was held in Cologne, Germany, October 9-14, 1999. ANUGA is the world's largest food show. A total of 200,000 buyers from 150 countries participated in the show. The 3-million-square-foot exhibit area held 6,540 spaces in 14 different pavilions. The Department participated with five Florida companies. Ten-million dollars in sales were projected over the following 12 months. A total of 461 trade leads were obtained during the show.

Florida Citrus in China

In March 2000, Florida Agriculture Commissioner Bob Crawford sold the first retail shipment of U.S. citrus in mainland China after carrying several boxes of Florida grapefruit and oranges to a supermarket in the downtown area of Beijing. During his visit, Crawford discussed the necessity of expanding the number of Florida counties permitted to sell citrus in China. Trade is currently limited to Indian River, St. Lucie, Martin, Palm Beach, Collier, Hendry and Lee counties. The Department is working with the USDA to assure Chinese officials that other Florida citrus-producing counties are eligible to ship products to China.

The historic sale last March culminated a decade-long effort by the Department, the federal government and the Florida citrus industry to open China to U.S. citrus. Only two weeks after Crawford carried the first commercial shipment of U.S. citrus to China, Florida growers began to benefit -- selling China 32 containers, nearly 1.3 million pounds, of fresh Florida citrus.

In May, the first shipment of Florida grapefruit was purchased by 16 major Beijing supermarkets and food stores. Research indicates China could ultimately represent Florida's largest overseas citrus market. Of China's 1.29 billion residents, up to 300 million may be potential customers.

Trade Missions and Reverse Trade Missions

The Department continues to market Florida agricultural products to the world through an array of overseas trade missions and by hosting foreign delegations.

Working with such organizations as the Southern United States Trade Association and United States Livestock Genetics Export, the Department conducted trade missions to the United Kingdom, Mexico, Brazil and Puerto Rico. These missions served to promote a variety of products including sweet corn, blueberries, dairy and beef cattle and cattle genetics.

The Department also hosted delegations from China, Australia, Angola and the Andean region of South America. Working with these delegations allowed the Department to share information and innovative marketing techniques, as well as promote Florida agriculture by giving visiting representatives firsthand knowledge of its quality and benefits.

Florida Market Bulletin

The Florida Market Bulletin is a primary vehicle for keeping Florida's farming community informed of issues affecting the state's agriculture industry and the Department. This agricultural newspaper has been published regularly by the Department since 1917. In addition to disseminating agricultural news and information, the Florida Market Bulletin provides a forum by which Florida residents can advertise to buy or sell agriculture-related items through its classified advertising section. During the 1999-2000 fiscal year, 4,497 classified ads appeared in the Market Bulletin, which is published monthly and serves approximately 15,000 Florida farming households.

Print, Radio and Video Production

The Bureau of Education and Communication is responsible for educating and informing consumers and helping coordinate the communication efforts of the Department through news releases, brochures and other publications, exhibits and displays, graphics presentations, the Internet and other multimedia productions. Bureau productions are a major component of the Florida Agricultural Promotional Campaign (FAPC), which assists the state's agricultural community in expanding markets and promoting and selling Florida-grown products.

During fiscal year 1999-2000, the Department issued approximately 120 press releases to inform the public about various regulatory and promotional activities. Additional publications regularly produced and distributed include the Department's Annual Report; the Consumer Interest newsletter, which deals with consumer education and product safety issues; and Open Lines, the Department's employee newsletter.

In addition, the Department produced numerous brochures, booklets and other printed materials pertaining to the varied activities of its 12 divisions. The graphics section was involved in the production of more than 160 major/intermediate projects and 200 ancillary projects. The Department also responds to inquiries from the public and mails out publications and other informational and promotional materials upon request.

The Department produces and disseminates informational, educational and promotional audio and video productions, such as television and radio public service announcements, radio programming, television news segments, documentaries and training videos.

A major agricultural producer assistance video produced during fiscal year 1999-2000 examined the growing potential for Florida alligator leather's use in high-fashion products. This educational and instructional video was distributed to designers nationwide in order to help increase the sale of Florida alligator leather to the fashion industry.

The 1999 Agricultural-Environmental Leadership Awards video documentary details the progressive environmental efforts of Lykes Bros., Inc., of Okeechobee; Two Rivers Ranch of Thonotosassa and Suwannee Farms of O'Brien.

The Department also produced a video promoting the more than 50 agricultural fairs and livestock expositions that are held yearly throughout the state. This video is shown at Florida Welcome Stations and other venues to help increase visitor interest and attendance at these events, which positively impact their local economies.

An introduction/overview video outlining the organizational structure and functions of the Department was also produced for use in the Department's new employee orientation program as well as for public presentations.

Numerous television public service announcements and promotional spots were produced on such issues as wildfire/arson prevention; the Citrus Canker Eradication Program in South Florida; the reforestation efforts of Florida foresters and landowners; the versatility and efficiency of propane gas and the Florida State Fair.

Radio programming during the fiscal year included promotional spots for Florida strawberries, tomatoes, propane gas and the Florida State Fair, as well as public service announcements promoting the WIC/Farmers' Market Nutrition Program.

Marketing Florida Agriculture on the World Wide Web

The Division of Marketing and Development's Internet web site, www.fl-ag.com, contains information and materials that help Florida farmers more effectively market their commodities. These marketing tools include trade leads, market prices, information about export assistance programs, agricultural statistics, weather reports, license and bond requirements, agricultural classified ads and more. The web site also helps inform consumers about the wholesomeness, variety and availability of Florida agricultural products. This is done by providing nutritional data, recipes, seasonal availability information, food safety tips and more. The web site fosters the notion that the more consumers know about the many agricultural commodities grown in Florida, the more they will choose to buy products that are "Fresh from Florida."

Planet Ag

An educational web site for students is also found at www.fl-ag.com. "Planet Ag" contains information to assist students in selecting a topic and carrying out their science fair project. The site provides students with an explanation of the scientific method, from choosing a topic and stating a hypothesis, to deciding on a procedure and recording the results. It also provides a sample project for students to review, a look at previous winners' projects and links to other agriculture- and science-related sites. Planet Ag also provides an overview of the importance of agriculture to Florida, and examines career possibilities in agricultural science, offering suggestions to students on courses to take in high school and

college. The goal of Planet Ag is to encourage today's bright young students to become interested in agriculture and its role in the planet's future.

Seafood and Aquaculture Marketing

The Department serves three seafood and aquaculture audiences:

• Consumers seeking information to wisely purchase, prepare, serve and store seafood and aquaculture products.

• Producers (fishermen, processors and aquaculturists) needing technical, educational, marketing and promotional assistance, as well as safety, handling and storage information.

• Retail-wholesale buyers and sellers wanting new sources and new types of seafood products, marketing and promotional assistance and safety, handling and storage information.

The Department reaches consumers through an active program to distribute seafood recipes and educational, handling and storage information via printed materials, news releases and public service announcements to television, radio and print media and appearances at regional seafood festivals. This year, brochures, posters, fact sheets, recipe tear-off cards and bumper stickers were distributed, and 119 newspaper, magazine, on-line magazine, TV and radio seafood articles and PSAs were created. As a result, 653 million impressions were generated throughout the state and country.

Florida fisherman and processors took advantage of several marketing and promotional opportunities to sell their products. Most of the Department's marketing and promotional programs utilize the eye-catching "Fresh from Florida" logo and are backed by a multi-level campaign creating consumer awareness and interest and fueling demand for Florida products. More than 1,093 seafood and aquaculture companies participate in the Florida Agricultural Promotional Campaign. During the year, incentives were offered to boost the use of the "Fresh from Florida" logo in product packaging. Ten seafood and aquaculture companies developed the Fresh from Florida logo on their cartons and product packaging reaching more than 823,000 people. Twelve companies participated in the "Fresh from Florida Pavilion" during the 1999 Florida Restaurant Association International Foodservice Expo and the 2000 International Boston Seafood Show. They received a combined $2 million in immediate sales and anticipate an additional $3.1 million during the next year. More than 35,000 grocery, foodservice, distributor and wholesale buyers visit these shows each year. A partnership with Ernest and Julio Gallo Wines, McCormick's Seasonings and Publix supermarkets, through the Florida Agricultural Promotional Campaign, was developed to facilitate sales of Gallo wines, selected McCormick's seasonings, Florida shrimp and grouper. The promotion boasted a 126 percent increase in Florida seafood sales.

The Department produces several publications highlighting Florida seafood and aquaculture companies' products, promotional and marketing programs, technical services and exporting opportunities. The Locator is a monthly listing of Florida products available for immediate export. An updated electronic version is sent to more than 36 U.S. embassies each month who release this information to over 4,000 importers. A bi-weekly Fresh from Florida Fax Trade Leads program targets exporting opportunities for seafood and aquaculture producers and distributors. More than 280 companies received seafood and aquaculture trade leads and credited this service with generating $2.3 million in sales. Marketing and promotional opportunities for seafood companies can be found in the Fresh from Florida Magazine which is sent to more than 8,542 subscribers.

Technical assistance to improve processing, handling and storage practices assumes many forms. The Department presented an overview of technical services during 25 industry trade meetings and responded to 15,970 individual requests for information.

The Department successfully acquired a grant from the U.S. Department of Agriculture to identify and assess potential direct markets for farm-raised shrimp grown on small Florida farms. The grant will assist Florida shrimp growers to determine the best markets and best products for those markets through nationwide market research targeting the consumer. The Department has joined efforts with the SeaGrant program at the University of Florida and the Gulf Oyster Industry Council to further study the taste, texture, appearance and marketability of a new oyster product which claims to remove any detectable harmful bacteria.

Tropical Fish Campaign

The Department has partnered with the Florida Tropical Fish Association, American Pet Products Manufacturers Association and aquatics industry companies for a $425,000 consumer and retailer marketing and promotional campaign to increase sales and consumer awareness of tropical fish and aquarium accessories. This will be achieved through aggressive outreach strategies and educational initiatives that will focus on enticing new aquarium ownership and revitalizing previous owner interest. The campaign will tout the positive social, psychological, entertainment and economic attributes of aquarium ownership. The theme developed for the campaign is Dive In! Aquarium Fish. The campaign has eight components. The first component is the web site www.diveintofish.com targeting adult and child consumers, retailers, media and aquatics industry. The second is a print campaign with development of adult and child consumer brochures on how to set-up and care for an aquarium. Next is an educational pilot program for elementary schools. The campaign also includes a retailer training program, a public outreach exhibit program, public relations, print and television advertising and a media tour.

American Alligator Campaign

The 1999-2000 Alligator Marketing Campaign included three major areas of focus. The first area focused on developing relationships with the high-fashion industry to encourage designers to create lines that utilize alligator leather. The second targeted manufacturers of finished products with the goal of developing fashionable and non-traditional uses of alligator. Thirdly, direct sales initiatives targeted consumers to increase awareness and educate them about the attributes of the industry and its products. The following elements were included in the campaign: 1) participation in four fashion fabric and leather trade shows; 2) ads and news releases targeting upscale consumer magazines, fashion trade magazines and manufacturing publications; 3) development of an attractive, multi-media presentation kit that included an information booklet and video for use by the industry and fashion designers; 4) reprints of the retailer targeted point of purchase materials and video.

In partnership with the Louisiana Department of Agriculture and Forestry and the Florida Alligator Marketing and Educational Committee, the Department participated in the 1999 International Fibers and Fabrics Exhibition/Tag Leather, 1999 Lineapelle Leather Show, 2000 Pan American Leather Fair and the 2000 Denver Gift, Jewelry and Resort Show. Twenty-three companies from both Florida and Louisiana participated in the American Alligator Leather pavilion at these shows. Average combined attendance was more than 56,000 with 272 quality trades leads.

Food Distribution

The Department administered or provided support through commodities or cash for a number of USDA programs in Florida, including the National School Lunch Program, Summer Food Service Program and the Emergency Food Assistance Program which provides commodities for distribution to the needy.

More than 344 agencies, including schools, food banks, food pantries and mass household distribution organizations, received over 66 million pounds of food. Over 2 million people were reached on a daily basis making Florida's food distribution program the fourth largest in the nation.

The Department is also involved in programs such as the Food Recovery Program which endeavors to eliminate hunger and food insecurity in the state. This year, approximately $13 million in fresh produce was donated by Florida farmers for distribution to the needy. In addition, the Department published the Food Recovery Resource Guide 1999-2000 which lists organizations involved in food recovery. These booklets are distributed to entities involved in the preparation of meals and/or the sale of food items such as schools, restaurants, hotels, grocery stores, etc.

WIC/Farmers' Market Nutrition Program

In Florida, the USDA's WIC/Farmers' Market Nutrition Program is administered jointly by the Department of Agriculture and Consumer Services and the Department of Health. The program has two statutory objectives: to provide resources to women and children who are nutritionally at risk in the form of fresh produce and to help local farmers by expanding the awareness, use of and sales at local farmers' markets. Booklets containing five $4 coupons were provided to 27,000 eligible WIC clients in Alachua, Bay, Escambia, Gadsden, Jackson, Leon, Okaloosa, St. Johns, Santa Rosa and Suwannee counties. Participants can redeem the coupons for the purchase of locally grown fresh fruits and vegetables from authorized farmers at community farmers' markets. WIC/FMNP continues to be very successful, achieving a 52 percent redemption rate despite the drought conditions experienced by the state this season. The program has been enthusiastically received by the WIC clients and the participating farmers alike.

ENSURING A SAFE, WHOLESOME FOOD SUPPLY

The Department's well-trained and experienced staff of inspectors and extensive network of laboratories, monitor approximately 39,000 retail food stores, processing plants and similar businesses to ensure compliance with food wholesomeness and safety standards. The Department maintains a close working relationship with the Food and Drug Administration (FDA), the United States Department of Agriculture (USDA), the Florida Department of Health and the Florida Department of Business and Professional Regulation to avoid duplication, share information and carry out food safety activities more effectively and efficiently.

The Department continues to emphasize proper sanitation and food handling procedures in the establishments it inspects, and also provides consumer protection safeguards by checking the accuracy of product labels, net weight and grade standards.

The Department also continues to be involved in the training and implementation of Hazard Analysis Critical Control Point (HACCP) programs in the food industry. HACCP concentrates on preventing or controlling food safety hazards, which may occur during any stage of the food production or handling process. Thus far, HACCP training efforts have concentrated on high risk foods including sprouts, unpasteurized citrus juice and seafood.

One of the Department's major missions is to protect the public from unsafe foods by monitoring for food borne pathogens and for pesticide and other chemical residues for the enforcement of established tolerances.

The Department is a leader in the development and implementation of sophisticated analytical techniques and methods to ensure the safety of foods throughout the production and distribution process.

By administering the Interstate Milk Shippers Program and similar state regulations, the Department assures consumers that dairy products are wholesome and are produced, processed and merchandised under sanitary conditions. These programs also enable Florida dairy farmers to ship their products in interstate commerce.

The Department emphasizes the prevention of food borne illness, but if a critical situation relating to food safety arises, it has the authority to immediately halt the sale of products deemed hazardous to the public.

Food Inspection

The Department has broad consumer protection responsibilities in the area of food safety. More than 39,000 locations, including retail food stores, food processing plants, food storage facilities and approximately 2,300 water vending machines, are inspected to assure compliance with food wholesomeness and safety requirements. During 1999, the Department adopted the Food and Drug Administration's Food Code 99, assuring that the most current scientific standards are utilized in inspection reviews. During fiscal year 1999-2000, more than 54,000 inspections, which produced an overall sanitation rating or HACCP report, were conducted to determine compliance with those standards. Other frequent activities by food inspectors included visits to establishments for complaint investigations, administrative purposes, sample collection and enforcement actions such as placement or removal of Stop-Sale or Stop-Use orders.

As a result of this inspection activity, the Department cited 3,211 individual food businesses for serious failures to meet sanitation and food safety standards, and 105 of those firms received administrative complaints, totaling $211,460 in fines. In other actions resulting from surveillance inspections, 28,166 stop-sale and notice of violation orders were issued, removing 4,139,165 pounds of unsafe or otherwise unfit food from the Florida marketplace.

In addition to sanitation and food safety concerns, inspections also entailed a variety of other consumer protection safeguards. Food labels were reviewed for accuracy and compliance with federal and Florida requirements; packaged foods were test-weighed to assure net weight accuracy; ground beef was tested to insure the amount of fat was correctly stated on the label and that poultry or pork products had not been added and for the presence of fillers and sulfites; shucked oysters were tested for mandatory expiration dating and added water; eggs were examined to verify labeled grade and size and other foods received similar quality and safety checks.

An important part of the food inspection program is response to consumer needs and concerns. Numerous telephone calls, e-mail messages and letters were received from consumers during the year asking a variety of questions about food in general or specific foods in the marketplace, or expressing a concern about food establishment conditions. A total of 3,124 consumer complaints were investigated during the year, and the complainants were advised of the findings.

To eliminate unnecessary duplication, the Department consolidated the requirements and procedures for permitting and inspecting firms bottling and/or distributing bottled water or packaged ice with those for other food establishments. That change means that since 1998, it is unnecessary for businesses that package ice, in addition to selling other foods, to obtain combination permits.

The Department continues to work in close cooperation with FDA and USDA on food safety activities. Under a contractual arrangement, the Department inspected 160 interstate food processors and collected 589 samples for the FDA, of which 50 samples were analyzed in FDA laboratories and 539 in the Department's Food Laboratory. The Department also continued to provide egg and poultry grading and inspection service for 12 establishments under a long standing contract with the USDA. A total of 868.2 million pounds of poultry and eggs were graded or inspected in order to qualify for grade labeling under USDA standards. The Department and the FDA have also entered into partnerships in several program areas, to avoid duplication, share information and assist each other in carrying out food safety activities.

The Department continues to enforce Florida's law requiring that the country-of-origin of all foreign produce be identified to food store customers. This identification can be accomplished through labeling of individual items or by signage at the display. During the year, 925 violations were identified, and 351 administrative fines totaling $108,200 were received from establishments that had violations.

The Department also continued its surveillance of herbal dietary supplements containing harmful compounds. Ingestion of products containing ephedrine alkaloids (e.g., Ma Huang) has been associated with several deaths, including at least one in Florida. Twelve products were banned by the Department during 1996 and 1997. No additional brands were found that needed to be banned in 1998-1999. One additional brand was banned in 1999-2000. Active surveillance continues due to the popularity of these types of food supplements and their ever-changing formulations and brand names. These efforts have been both worthwhile and effective in reducing the risk to Floridians from these products.

The Department initiated administrative actions against approximately 600 food establishments that did not pay the required renewal fee for a Food Establishment Permit and collected $118,200 in administrative fines and fees for late payment. Although these establishments were open for business and had been inspected, they were in violation because they were operating without a permit. Permit renewal is required annually under Florida law. In addition to the overdue food permit fee, the establishments were required to pay an administrative fine.

Hazard Analysis Critical Control Point (HACCP)

The Department continued to be actively involved in the training and implementation of HACCP programs in the food industry. HACCP is an internationally recognized science-based, systematic, preventive, process control program to assure the production of safe food. It complements existing sanitation and good manufacturing practices programs. The program concentrates on preventing or controlling hazards, which may occur during any stage of the food production or handling process. Implemented in December 1997, the seafood HACCP rule requires seafood processors to develop and follow a HACCP plan. During fiscal year 1999-2000, 246 verification inspections of seafood HACCP programs were conducted. The Department's HACCP unit coordinated with industry and other agencies to provide training and information.

HACCP personnel continue to be involved with industry, academia and regulatory agencies to provide training support and expertise as HACCP principles are applied in other food industries, such as citrus juice processing, sprout growers, shell eggs and retail establishments.

Other Programs

The Department has completed the transfer of responsibility for food safety in blue crab processing establishments from the Florida Department of Environmental Protection (DEP) and commenced

regulation of those establishments. An updated Florida Administrative Code dealing with blue crab regulation has been adopted. There were minimal changes for the operators of blue crab establishments. Most of them obtained a food permit, and 19 were being inspected under the seafood HACCP program as of the end of fiscal year 1999-2000.

The Department maintains an active role in managing food safety issues, including investigating food-borne illness, coordinating the collection of samples with the Food Laboratory to monitor potentially unsafe foods, responding to consumer requests and providing educational materials, conducting informal hearings on administrative complaints and interpreting rules to maintain an overall food safety program that addresses both local and national concerns.

Food and Residue Laboratories

The Department's food and residue laboratories analyze samples collected throughout Florida for such things as pathogenic bacteria, chemical contamination, pesticide residues, nutrition, food additives and fraudulent formulations. These samples are collected from farms, through processing and distribution channels, to the retail point of purchase. All foods grown or manufactured inside or outside of Florida, including foreign countries, are subject to unannounced collection and analytical testing to assure adherence to the standards of wholesomeness, safety, freedom from contamination and proper representation in labeling.

Pesticide Residues

One of the Department's major missions is to protect the public from unsafe foods by monitoring pesticide and other chemical residues for the enforcement of established tolerances. The Department also provides pesticide residue data for federal agencies to use in making dietary risk assessments. During the 1999-2000 fiscal year, the Department conducted 274,000 separate determinations for pesticide residues on 2,961 food samples, primarily fresh fruits and vegetables, including 1,299 samples for the USDA Pesticide Data Program.

Samples are selected for the regulatory surveillance program based on the crop's propensity to accumulate pesticide residues in the consumed plant parts and the toxicity and other related chemical and physical properties of the pesticide. About 2.15 percent of samples analyzed exceeded established tolerances and guidelines. Public concerns about pesticide residues in the food supply remain strong, e.g., the Consumers Union of United States, Inc., report, "Do You Know What You're Eating?" The Department's monitoring program is one of the most comprehensive monitoring and enforcement programs in the nation and provides the public with valuable information of the safety of the food supply.

During fiscal year 1999-2000, a misuse of chlorothalonil in Florida-grown collards and kale resulted in an investigation of several farms in the Palatka area. Chlorothalonil does not have a tolerance for collards and kale. Product was destroyed both at the packing house and in the field. Inspectors sampled several different fields, issued notices of adulteration and informed owners of the misuse.

In a second investigation, samples of honey offered for sale were collected and analyzed for residues of coumaphos. At the time of collection, there was no food tolerance in place for coumaphos in honey since EPA had approved the use of coumaphos in honey as a non-food use. The laboratory developed a method which was five times more sensitive than the method developed by the pesticide registrant. Honey samples which were analyzed contained very low levels of coumaphos. In re-

sponse to these findings, EPA established a honey tolerance of 0.1 ppm for coumaphos.

Of the 35 violative samples analyzed in fiscal year 1999-2000, six samples were imported produce. Violations included methomyl on asparagus from Peru, methamidophos on squash from Nicaragua, iprodione on cucumbers from Canada, iprodione on zucchini from Guatemala, endosulfan on rutabagas from Canada and procymidone on grapes from South Africa.

Education and Training

Educational opportunities for laboratory personnel were emphasized in order to remain on the leading edge of science and technology. In July 2000, the Department hosted its 37th Annual Pesticide Residue Workshop, which attracted 200 pesticide residue scientists to Florida from all parts of the United States, Canada, Europe and Asia. In addition, the Department also hosted the Third Annual Food-Borne Pathogen Analysis Conference for microbiologists working in the identification of pathogens in foods. One hundred and nine delegates attended this conference. These meetings allow Department chemists and microbiologists to learn more about the latest developments in technology through interaction with experts from other agencies and nations. The Department sponsors the Foodborne Pathogen Analysis Conference and is involved in presenting programs on food safety and consumer issues. In addition, analysts presented scientific papers at regional meetings.

Food Pathogens and Other Problems

Food safety issues remain a major emphasis of the analytical program. With the continued identification of food-borne illness outbreaks, increased monitoring for pathogens in ready-to-eat-food is necessary. Analytical tests for pathogens included 1,654 tests for Salmonella, 1,582 tests for Listeria monocytogenes, 1,793 tests for E. coli, 1,642 tests for E. coli O157:H7. Targeted products for these analyses included ready-to-eat produce, processed meats, ground beef, cheese and sandwiches. As a result of outbreaks, the Department continues to monitor fresh citrus juices, imported herbs, prepared salad greens and fresh sprouts. The monitoring of bottled water, vended water and ice accounted for 1,914 samples with 59 samples identified as adulterated by either microbiological or chemical contaminants.

Other areas of emphasis include monitoring juice products, honey, syrups and vanilla for fraudulent formulations or adulteration, ground meats for fat claims and species identification and artificial colors in candy, sodas and bakery products. Bakery products and spices were also monitored for insect filth and rodent contamination, and claims on no-fat and low-fat products were checked. Laboratory surveillance continued for mercury in fish and for ephedra in food products as part of the analytical program.

The Department's food laboratory uses microbiological, chemical and physical methods to analyze foods processed or sold in Florida to ensure a safe and wholesome food supply, to verify the absence of adulterants, to ensure conformance with standards of safety and quality, and to ensure accurate representation in labeling and nutrition claims. Emphasis is placed on current and emerging food safety issues, such as microbiological contamination, unapproved food components, filth, chemical and heavy-metal contaminants, new food and food packaging technology, nutrition and other label claims and natural toxicants.

During this fiscal year, the Department performed 40,241 analyses on 8,453 food samples. Ninety-two percent were found to be in compliance with all applicable food safety requirements. Under state programs, 8,130 samples were received from food inspectors, 24 from the Division of Dairy Industry, 16 from the Division of Plant Industry, 106 from the Division of Agricultural Environmental Services and 74 from miscellaneous sources. A total of 275 samples were analyzed as a result of consumer complaints. In addition, 539 samples were analyzed through the Department's sanitation contract with the FDA. The Department participated with FDA, USDA, three other state laboratories

and two local laboratories in a national laboratory pilot program. The pilot involved standardization for the isolation, identification and electronic data transmission for E. coli O157:H7. Another part of this pilot program involved preparing for ISO 17025 accreditation. The Department has been working on a quality manual and supporting documents in preparation for applying for accreditation.

The Department participated in a Listeria enumeration AOAC collaborative study with QA Life Sciences and has been actively involved, along with the HACCP inspection unit, in an FDA grant project concerning the microbial quality of sprouts. In addition, the Department has done many surveys of commodities including organic produce, spices and ready to eat foods.

The new molecular section of the Food Laboratory is working on bringing up DNA fingerprinting for bacterial food isolates. DNA fingerprinting allows not only for source connection in food borne outbreaks but many times aids inspectors in determining source contamination within a food processing system. Allergens, such as egg and peanuts, as well as low fat and sugar free claims continue to be monitored for consumer protection. The Department continually monitors food products for major labeling violations.

Milk Products

The Department ensures that dairy products purchased by Florida consumers are wholesome, produced under sanitary conditions and correctly labeled. The Department regulates the production, transporting, processing, distribution and labeling of milk and milk products. It establishes standards for these products, whether they originate in Florida or other states.

The Department issues permits and conducts inspections for Florida dairy facilities. As of June 30, 2000, these facilities included:

227 dairy farms,
15 milk processing plants,
84 frozen dessert manufacturers,
15 single service milk container manufacturers,
33 milk distribution depots,
3 milk receiving, transfer and wash stations.

In addition to its inspection program, the Department collects and tests samples from dairy farms and processing plants for compliance with established product quality standards. These samples are collected by field inspectors and tested in a Department laboratory for excessive bacteria and somatic cells and for the presence of antibiotics, added water and other impurities.

The programs administered by the Department are part of a uniform national dairy sanitation program outlined in the Pasteurized Milk Ordinance (PMO) published by the Food and Drug Administration (FDA). Likewise, most of the dairy product quality standards enforced by the Department are part of the PMO or the Code of Federal Regulations. As in all states, both the PMO and the relevant sections of the Code of Federal Regulation have been adopted in state statute or rule.

The fact that all states have adopted uniform regulations makes it possible to ship dairy products from state to state with a minimum amount of interstate regulatory interference. The interstate shipment of dairy products is coordinated through the Interstate Milk Shippers Conference, an organization that includes representation from FDA, the dairy processing industry and all state dairy regulatory agencies.

FDA inspectors perform periodic spot checks in each state to insure that the regulations in the PMO are being interpreted and enforced uniformly. A state which fails its FDA inspection can be

denied the right to ship Grade A milk across state lines. FDA inspectors visited Florida twice in the past year. They inspected two farm groups, two processing plants and four other facilities, rating them all satisfactory.

The Florida Dairy Industry

Florida dairy farms are large, milking an average of almost 700 cows each. In spite of the hot, humid climate, these cows average about 15,500 pounds of milk per year or about six gallons per day per cow. Even though the state's 158,000 dairy cows rank it first in the Southeast and among the top 15 states nationally, Florida still imports approximately 25 percent of its milk, and the proportion of imported milk is growing. Florida's 15 Grade A milk processors include four Dean Food plants, two Suisa plants, two Publix plants and two Winn-Dixie plants.

Dairy Inspections

The Department's 13 field inspectors are stationed from Miami to Pensacola. They make regular visits to dairy farms and processing plants to inspect, consult and collect samples. During the past year, dairy inspectors performed 2,242 scored inspections at dairy farms and plants in Florida. They also collected 16,952 samples of milk and milk products. They made 449 inspections of milk transport tankers.

Monitoring Antibiotics in Milk

The industry has established a rigorous program to monitor milk for contamination with residues of antibiotics commonly used to treat cows on dairy farms. During the year 67,415 transport tankers representing more than 3.2 billion pounds of milk were checked for antibiotics in Florida. Only 24 of these tankers, approximately 1 in 2,800, were found to contain traces of antibiotics. All 24 loads were dumped. Nationally about 1 in 1,000 tankers of milk are found to have antibiotic contamination. Florida dairymen do an exceptional job of preventing antibiotic residues in their milk.

Checking the Weight of Milk Products

Florida recently participated in a national weighing program sponsored by the Federal Trade Commission. The Department has several inspectors trained to make official weights of milk products and has been monitoring weights of processed milk containers in Florida for over 15 years. Florida did better than any other state. Ninety-eight percent of the lots tested in Florida had at least the amount of milk specified on the container.

Aquaculture

The Division of Aquaculture is the newest Division within the Department. It was created during the 1999 legislative session and formally began as a Division July 1, 1999. The division is comprised of what was formerly the Bureau of Marine Resource Regulation (within the Department of Environmental Protection) and part of the Bureau of Seafood and Aquaculture (within the Depart-

ment of Agriculture and Consumer Services). The division presently has two bureaus: the Bureau of Aquaculture Environmental Services and the Bureau of Aquaculture Development.

Shellfish Programs

The Bureau of Environmental Services houses the shellfish evaluation and assessment programs, shellfish processing plant inspection and the shellfish laboratory. The two major program activities conducted by the bureau are classifying and managing shellfish harvesting areas and licensing, inspecting, educating and ensuring compliance of shellfish processing facilities.

The shellfish harvesting area program seeks to classify and manage Florida coastal waters for maximum use of shellfish resource, protection of public health and promotion of a healthy coastal environment. A total of 37 shellfish harvesting areas are currently classified and managed state wide and encompass over 1.1 million acres. During fiscal year 1999-2000, 20,779 water samples for fecal coliform bacteria were analyzed.

The shellfish processing program seeks to ensure wholesome shellfish products through inspection, education and enforcement of state regulations and national guidelines. The program ensures Florida's compliance with the provisions of the National Shellfish Sanitation Program. A total of 120 shellfish processing plant certifications licenses were issued during fiscal year 1999-2000.

Aquaculture Development

The Bureau of Aquaculture Development houses the aquaculture component of the Department. Florida ranked third behind Mississippi and Arkansas with $76.7 million in sales and will continue its commitment to encourage the development of the aquaculture industry in Florida. This commitment is based on the belief that aquaculture will become an integral segment of Florida's agricultural and economic future by providing high quality aquacultural products to worldwide markets while advancing resource management. Some of the activities used to promote the development of aquaculture include regulatory, administrative, advisory and extension functions directed toward ensuring the aquaculture operations are compatible with the Florida Aquaculture Plan, Aquaculture Certification Program, best management practices, resource management goals and public health protection.

Certification and Leasing

The bureau is divided into four primary program components. The Aquaculture Certification Program requires aquaculturists to annually obtain certification from the Department. The aquaculture certification identifies crops as aquaculture products and, thus, as agriculture. The certification ensures that aquaculturists receive all the rights, privileges and regulations of any other agriculture commodity. Additionally, the certification serves as the basis of the new regulatory program of Best Management Practices for aquaculture. Farmers, in applying for certification, are certifying that they will comply with Best Management Practices for aquaculture or appropriate interim measures. During the 1999-2000 fiscal year, 849 aquaculture certificates were issued. To provide assistance and ensure compliance with appropriate regulatory requirements, site visits are made to each facility.

The Sovereign Submerged Lands Leasing Program has the statutory authority to administer the aquaculture leasing program and it is provided in sections 253.67-253.75, F.S. Section 253.002(1),

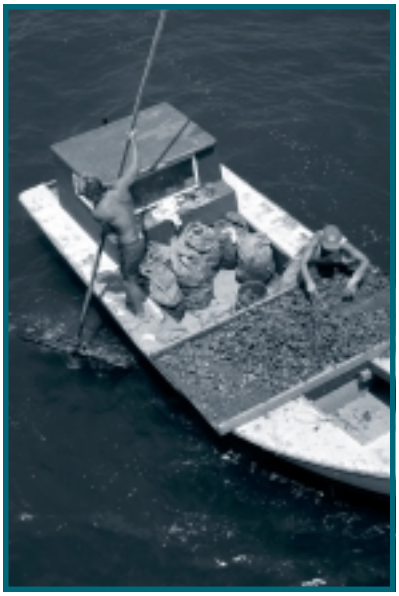
as amended in CS/CS/CS/SB 806, that the Department shall perform the staff functions related to the use of sovereign submerged lands for aquacultural purposes. On July 25, 2000, the Board of Trustees delegated authority to the Commissioner of Agriculture to perform duties and functions on behalf of the Board for actions associated with aquaculture on sovereignty submerged lands.

Pursuant to Chapter 253, F.S., the bureau administers 690 aquaculture leases containing about 1,700 acres. Aquaculture leases are located in the following counties: Brevard, Charlotte, Dixie, Indian River, Lee, Levy, Monroe, Pinellas and Volusia. In response to its statutory mandate, the bureau identifies tracts of submerged lands throughout the state that are suitable for aquacultural development. The aquaculture section has designated 19 special aquaculture use areas in seven coastal counties, including Dixie, Levy, Charlotte, Lee, Indian River, Brevard and Volusia. The Department has also entered into a management use agreement with Citrus County to locate an experimental bay scallop aquaculture project in coastal waters off of Crystal River. The bureau also administers 122 shellfish leases occupying about 1,725 acres under the provisions of Chapters 370 and 597, F.S.

Other Aquaculture Programs

The Oyster Culture and Shellfish Resource Development Program is under the mandate to improve, enlarge and protect the oyster and clam resources of the state. The bureau is actively engaged in enhancing shellfish resources and restoring oyster reefs on public submerged lands. During fiscal year 1999-2000, the bureau collected 185,000 bushels of processed oyster shell from processors in Franklin County and planted 42,000 bushels on public reefs. Oyster resource development projects were conducted in cooperation with local oystermen's associations in four coastal counties. A total of 284,574 bushels of live oysters were re-planted on public reefs in Franklin, Wakulla, Dixie and Levy counties.

The Division of Aquaculture also acts as staff to the Florida Aquaculture Review Council; the Florida Aquaculture Interagency Coordinating Council; represents the National Aquatic Association during meetings of the Aquatic Nuisance Species Task Force and participates on a technical subgroup to the Environmental Protection Agency's Aquaculture Effluent Task Force.



CONSERVING THE NATURAL ENVIRONMENT

Best Management Practices

The Department continued with implementation of the 1994 nitrogen Best Management Practices (BMPs) program. Due to the diversity of agricultural commodities and production areas in Florida, the Department has prioritized the development of BMPs for those commodities and/or regions where ground water protection concerns are high.

To date, the Department has received letters of intent from growers identifying 1,067 parcels of land representing an unspecified number of acres that have been placed under best management practices adopted through the nitrogen BMP program representing the various crops including citrus, vegetables and ferns.

In fiscal year 1999-2000, the Department completed the evaluation of 17 research proposals for additional nitrogen BMP development from the University of Florida and the Florida Agricultural and Mechanical University. The BMP Technical Group consisting of growers, academia and industry representatives assisted the Department with the selection of these research proposals funded through supplemental fees on fertilizers containing nitrogen. Forty-two contracts have been awarded thus far under the program.

Complementing its traditional regulatory role, the Department also provides technical, logistic and rule making support in the development, implementation and assessment of BMPs for nitrogen.

These voluntary BMPs can provide Florida's growers with practical methods to raise crops that are consistent with goals for ground water quality protection.

Areas in which significant progress was made toward BMP development are highlighted below:

Middle Suwannee River Basin

The Department played a central role in the initiation of a five-year study to examine the impact of existing nutrient and irrigation practices on ground water quality in the Middle Suwannee River Basin and to identify improved practices for implementation by growers in the region. During 1999-2000, a 160-acre center-pivot irrigation plot was instrumented with a network of ground water monitor wells, and a full year of water sampling and analysis was completed. This progress was achieved in large part through the technical efforts of the Department with critical cooperation provided by the farm's operator and collaboration by other members of the Middle Suwannee Basin Nitrate Management Working Group. In the next phase of the study, the Department is funding research to underpin the development of improved nutrient and irrigation management practices for potatoes, sweet corn, forage grasses and row crops. This effort will allow growers to adopt practices which are protective of ground water resources as demonstrated in field research.

The Department also initiated rule making to adopt an interim measure for forage grasses (Bahiagrass and Bermudagrass) grown within the Suwannee River Water Management District boundaries. Forage grass production represents the largest agricultural commodity grown in the basin, with the exception of forestry. The interim measure encourages forage growers to follow the nitrogen recommendations published by the University of Florida Institute of Food and Agricultural Sciences.

St. Lucie Estuary

The Department is coordinating a multi-agency task force in the development of water quality based BMPs for citrus growers in the St. Lucie River and estuary. The Department has developed a mechanism to identify and implement feasible BMPs in the short term, coupled with the identification of specific research needs to develop improved BMPs for the long term. A manual of interim BMPs has been published and distributed in the basin to provide citrus growers with suggested practices to address pesticide and nutrient management, water management, erosion control and aquatic weed management in an effort to reduce offsite migration of contaminants.

Ground Water and Surface Water Protection

The Department provided significant efforts in several areas to ensure that pesticides may be used without detriment to Florida ground and surface water quality. These efforts began with pesticide product registration review and the review of new modeling techniques including geographic information systems to support registration decisions. The Department also oversaw the completion of a registrant's Florida prospective field study for the pesticide active ingredient, azafenidin. This study was conducted to prepare supporting data for registration by the EPA and the state of Florida.

A new retrospective monitoring effort was started this year to compile databases from federal, state and local agencies on pesticide detections in potable wells, production wells and monitoring wells. Work also continued on a retrospective monitor well network, through coordination with the Department of Environmental Protection, the Southwest Water Management District, area growers and continuation of a contract with the US Geological Survey to design and install a network of shallow monitor wells in the Lake Wales Ridge Region. This network will aid in early detection and

management of potential migration of pesticides and nitrates to ground water. Sampling of 23 monitor wells began this year, and more sites for well installation have been selected.

Surface water protection needs and the use of low-dose herbicides prompted the development of a modeling and decision support framework for evaluation of products before registration. This framework is currently under internal review and will undergo external review in the near future. The Department also participated in a work group at the Department of Environmental Protection to develop field study procedures for the low dose pesticide, halosulfuron methyl.

In conjunction with efforts in the Middle Suwannee Basin to evaluate the effectiveness of agricultural practices on nutrient migration to ground water, the Department continued testing for nutrient and pesticide residues in monitor well samples. Regular sampling of these wells will help determine the effects of irrigation management on pesticide leaching.

The Department is participating in a multi-agency task force to aid in the development of a sampling program and the subsequent management and remediation program for the North Shore Restoration Area (NSRA) of Lake Apopka. Data from the soil sampling effort of the NSRA soils has been validated. The task force retained a panel of six experts to evaluate the potential for the detected pesticide concentrations in the environmental media to be involved in the bird deaths of 1998 and to recommend remediation procedures to be used by the St. Johns River Water Management District, prior to re-flooding the NSRA. The task force also wishes to utilize these refined risk assessments in its efforts to identify and implement long-term management options for the NSRA.

The Department participated in the Contaminated Soils Forum, the Arsenic Background Evaluation Study Technical Assistance Group and in discussions with other agencies, universities and trade representatives concerning copper-chrome-arsenic waste disposal. The Department continues to offer assistance to other departments and agencies on design and interpretation of field investigations.

Pesticide Registration

The Pesticide Registration Section registers pesticides that are distributed, sold or offered for sale in Florida. During this fiscal year, 14,184 pesticide brands were registered for sale and distribution in the state. Over $3.1 million in registration fees were collected to support the Department's pesticide programs.

Included in this total are special registration actions such as Experimental Use Permits, Special Local Need registrations and New Active Ingredient and Significant New Use registrations that are processed, reviewed and issued. These special registrations are reviewed by the Department and other affected state agencies through the Pesticide Registration and Evaluation Committee (PREC), a consensus determining body that is responsible for evaluating pesticides and advising the Department of risks posed by registration and possible solutions or actions for reducing risks to acceptable levels. The Registration Section professional staff serve as both liaison and active participants in the PREC process. This fiscal year 16 Special Local Need registrations, eight Experimental Use Permits and nine Significant New Use and 20 New Active Ingredient registrations were reviewed and issued.

Additionally, the Pesticide Registration Section is responsible for applications for emergency exemptions from registration to address non-routine pest emergency situations. These petitions are evaluated and may be issued by the Department or submitted to the Environmental Protection Agency for action. These exemptions typically include requests for new low-risk chemicals of novel activity that may actually decrease the total use of chemicals on the affected crops through their compatibility with integrated pest management programs and elimination or reduction of repeated applications of broad-spectrum pesticides of limited efficacy. These pest emergencies often involve exotic introduced pest species with the potential to devastate affected crops and commodities and

include exemptions issued this year for brown citrus aphid, citrus leafminer and diaprepes weevils in citrus and the small hive beetle and varroa mite in honeybee colonies. A total of 16 emergency exemption petitions were evaluated by the Registration Section this year. In addition, the Registration Section assisted the USDA in obtaining a quarantine exemption for pesticides needed to control exotic ticks on reptiles. These ticks are potential carriers of African heartwater disease, a bacterial infection that, if established in the United States, is capable of devastating cattle, deer and other ruminant animal populations.

Pesticides: Worker Protection Program

The Department, in cooperation with other institutions such as the University of Florida's Institute of Food and Agricultural Sciences and United Agri-Products, continues to actively implement the Worker Protection Standards (WPS) program in Florida. It assists growers, extension agents and trainers in how to comply with WPS and distibutes educational materials such as "Protect Yourself from Pesticides" for agricultural workers, in English, Spanish, Creole and Vietnamese. Other materials pertinent to worker safety are made available through the Department upon request, and it continues to provide AmeriCorps staff with WPS pesticide safety training materials. This year, the Department produced and distributed 22,797 pesticide "Fact Sheets for Growers." These documents are aimed at improving compliance with WPS requirements. It also developed a WPS web site (http://doacs.state.fl.us/~aes/wps.htm) which includes an explanation of the Department's WPS program, references and links to related WPS resources.

In its continuing committment to effective farm worker protection programs, the Department continued working with the Department of Health to implement a Pesticide Poisoning Surveillance Program mechanism for reporting and classifying farm worker illnesses that may attributable to pesticide exposures.

The Department has held 24 train-the-trainer programs and certified a total of 258 participants. A total of 24,369 training verification cards have been issued in accordance with the Environmental Protection Agency's WPS guidelines. Although the Worker Protection Act approved in 1994 by the Florida Legislature expired on January 1, 1998, the Department will continue to provide the Pesticide Safety Sheet in three languages: English, Spanish and Creole. Furthermore, an audio novella for female farm workers is being developed jointly by the Department, the EPA, and the Florida Department of Health. The purpose of this project is to increase awareness among this population about pesticide safety and good prenatal care.

Pesticides: Endangered Species Protection Plans and EPA County Bulletins

The Department enhanced its outreach efforts to caution pesticide users about potential impacts on endangered species through completing a contract with Florida Natural Areas Inventory (FNAI) to develop habitat and species occurrence maps for various endangered species. These contracts allow FNAI to provide the Department with GIS-based species occurrence maps. Ten endangered species maps have been completed including Chapman's rhododendron,the Everglade snail kite and the Schaus swallowtail butterfly. These maps will ultimately be incorporated into EPA county bulletins, the Department's website and other appropriate outreach mechanisms. A threatened and endangered species risk assessment for pesticide evaluation has been developed for aquatic species and is currently in review.

Pesticides: Usage Reports

The Department collated and summarized recent reports on pesticide usage information and county specific acreage for 22 major crops in Florida. The final report, entitled "Summary of Agricultural Pesticide Usage in Florida: 1995-1998," was distributed in January 2000 to growers, federal and state regulatory personnel, universities and interested parties. The report provides pesticide-specific estimates of the average number of applications each crop receives, the amount of active ingredient (AI) applied per application, the amount of AI applied per acre per crop year and a calculation of the total pounds of AI applied per crop. Also included is the percent of Florida crops treated statewide.

The top 22 crops included in the report represent the majority of crop acreage and crops in Florida for which pesticide data are available. A total of 134 pesticides (48 herbicides, 50 insecticides, 25 fungicides and 11 other chemicals) are reported. These pesticides include both General Use Pesticides (GUPs) and Restricted Use Pesticides (RUPs). This Florida report includes pesticide usage for agricultural activities and for mosquito control operations. Pursuant to Chapeter 487.16 F.S., this report will be updated every three years using newly released reports with updated estimates and information.

Quality Assurance and Quality Control Activities

The Department conducted two internal field audits for Quality Assurance and Quality Control (QA/QC) in accordance with the guidelines of the Florida Department of Environmental Protection (DEP). The first annual internal audit was conducted October 25-26, 1999, for the sampling activities at two citrus sites near Sebring in Highlands County for the Ridge Citrus Water Quality Project for nitrate. The second audit was conducted on March 27, 2000 for the field sampling activities for the Suwannee River Water Quality Nitrate Project. The audit reports included a brief description of the site, the auditing procedure, observations of pre-sampling, field sampling of monitoring wells and post sampling activities at the site. The audit reports concluded that no sampling activity, task or action was found to affect the data adversely, although some suggestions were made for future consideration.

The Department staff reviewed the revisions to DEP's Standard Operation Procedures (SOPs) which have direct impacts on field sampling and laboratory support of the Department. The review comments were forwarded to DEP. More review comments will follow when the revised SOP document is completed with all sections available for review.

Pesticide Laboratory

The Department's Pesticide Laboratory analyzes a variety of official samples including formulated pesticide products and pesticide application tank mixes and environmental samples to support misuse investigations and environmental monitoring activities. Formulation analyses are performed in accordance with Chapter 487, F.S., for label guarantee, and tank mix samples are performed for the correct percentage active ingredient. Both formulated product and tank mix samples are screened for contaminants of other pesticides to ensure product safety and accuracy. A total of 297 formulation and/or tank mix samples were analyzed, requiring 3,940 sample determinations to verify that the correct percentages of guaranteed active ingredients were within allowable tolerances. The laboratory detected a 2.2 percent violation rate of label guarantee.

In support of registration and technical assessment activities, 699 environmental samples requiring 17,745 determinations were analyzed. The laboratory also responded to several requests from other

agencies by providing analytical services for misuse investigations. Most notable was a case involving the misuse of a pesticide to eliminate predators on game plantations by the doping of eggs with a potent pesticide, carbofuran, that resulted in the death of an eagle. In addition, the laboratory analyzed several malicious pet poisoning cases, detecting rodenticides and insecticides in the samples submitted. Finally, the laboratory also participated in the Department's efforts regarding Medfly readiness. An Experimental Use Permit was granted by the USEPA to utilize a new insecticide, spinosad. The laboratory supported this effort through the development of methods and analysis of product formulations, tank mixes, water, soil and drift cards.

In an effort to ensure a high quality of analysis, the laboratory analyzed 671 quality control samples, requiring 13,462 determinations. These samples include samples run for method development and validation as well as for method quality control.

The laboratory also expanded its analytical capabilities by obtaining a liquid chromatographic mass spectrometer (LC/MS), a new GC/MS and a variety of analytical equipment to replace older system components or enhance method preparation support. Several members of the laboratory attended professional conferences and technical training for use of new equipment.

Pesticide Certification Section

The Department issued or renewed 3,444 pesticide applicator licenses and 559 pesticide dealer licenses during the fiscal year. This certification and licensing program, through training and competency testing, helps ensure a safe food supply, healthy environment and the protection of workers and the public. The Certification Office also processed 4,124 aldicarb application notifications and tracked the application of aldicarb to 378,707 acres of citrus, 34,946 acres of potatoes, 32,317 acres of cotton and 18,523 acres of peanuts in connection with the ground water protection program for this product.

Pesticide Compliance Section

The Department investigated 54 complaints involving alleged violations of the worker protection standard as compared to 11 from the previous fiscal year. Of the 54 investigations, 23 were re-inspections to verify compliance with the WPS from actions taken in the previous fiscal year, and 21 were requested by the EPA to verify compliance with labeling requirements under the WPS. In addition, the Department conducted a total of 350 worker protection inspections, as compared to 386 in the previous year.

The Department conducted 2,546 pesticide inspections at users, dealers, distributors and manufacturers during the fiscal year. These inspections resulted in 634 enforcement actions including Stop Sale, Use Hold Orders. There were 508 samples collected for pesticide formulation and pesticide residue analysis. The Department investigated 344 complaints and referrals involving violations, such as improper pesticide use, adverse environmental effects and distribution of unregistered products. Fifty-one fines were issued for pesticide product related violations during the fiscal year, totaling $78,200. The Department inspected 106 wells that apply chemicals through irrigation water to assure adequate ground water protection devices had been installed. These programs help ensure pesticides are properly registered, labeled and sold only to those individuals who have been trained in their use.

Forestry Programs

The Department's mission statement is to protect and manage Florida's forest resources through a stewardship ethic to ensure these resources will be available for future generations. Four core programs embrace this mission statement: 1) wildfire prevention, detection and suppression; 2) forest land management; 3) technical assistance for private landowners; and 4) the Forestry Youth Academy.

New Initiatives

In 1998, the Florida Legislature provided funding and positions for wildfire prevention and mitigation within the Department. Three wildfire management teams were created to enhance the Department's existing wildfire mitigation and public awareness activities. In 2000, the Legislature provided funding for a fourth team.

Forest Protection

The Department is responsible for wildfire prevention, detection and suppression. The dry conditions that plagued the state during 1998 and 1999 continued in 2000, resulting in substantial rainfall deficits. Rainfall amounts were less than 50 percent of the average through May of 2000. The state average Keetch-Byram Drought Index (KBDI) on May 1, 2000 exceeded the KBDI measure of the previous two years.

This implied a strong potential for severe wildfire activity and that proved to be the case, with drought indexes exceeding both 1998 and 1999 through the months of May and June 2000. The number of April wildfire starts exceeded the historical average by 27 percent. As a result, Commissioner Crawford filed a Declaration of Severe Drought Emergency with the Secretary of State on May 17, 2000 and immediately implemented a statewide outdoor burn ban.

More than 5,000 firefighters suppressed 6,233 wildfires during the 1999-2000 fiscal year. A total of 4,758 of the fires were human-caused, a 21 percent increase over the previous year. Some of the most catastrophic wildfires in Florida's recent history occurred during the past two years with 5,378 wildfires during the 1998-1999 fiscal year and 4,935 wildfires during the 1997-1998 fiscal year.

Although the number of wildfires was greater during the 1999-2000 fiscal year, the acreage burned (178,000 acres) was 46 percent less than the previous year. This was a result of additional personnel and equipment that allowed Department firefighters to respond to fires more quickly and keep them small.

Safety is a priority with the Department, however, firefighting is always dangerous work. The Department experienced a tragic loss this year with the death of George "Bo" Burton, Firefighter Rotorcraft Pilot for the Division of Forestry who was killed on June 4, 2000, when his helicopter crashed while fighting a wildfire in Lee County.

As a result of additional equipment and positions provided by the 1999 Legislative Session, the Department was able to place increased emphasis this year on hazard fuel reduction in wildland/urban interface areas. Three new Fire Management Teams headquartered in Bonifay, Bunnell and

Punta Gorda assisted the Department's Districts and Forestry Centers with prescribed burning or mechanical hazard fuel reduction on 6,546 acres to protect 3,158 homes. Six Wildfire Mitigation Specialists, also provided to the Department by the 1999 Legislative Session, worked with the print and electronic media to strengthen the Department's fire prevention program.

During the 1999-2000 fiscal year, the Department acquired equipment through the Federal Excess Personnel Property Program valued at approximately $1.9 million. The equipment will be distributed to rural fire departments throughout Florida. The Department also acquired approximately $21 million worth of helicopter aircraft equipment and parts through this program.

The wildfire experience gained over the past three years has enabled Florida firefighters to respond to fire resource requests from other parts of the country. This summer the Department dispatched over 200 Department firefighters and 40 structural fire department employees to assist with the catastrophic wildfires in the western United States. This has allowed the Department the opportunity to assist states, which supplied firefighting personnel and equipment to Florida during the past three years.

The Department also led the nation by conducting the beta test for the National Fire Protection Association's FIREWISE Communities workshop in Deerfield Beach on October 6-8, 1999. This mitigation program promotes the improvement of existing subdivisions, or new subdivision development, through fire prevention concepts, thus increasing their protection from wildfires.

Natural Resource Management

Natural resource management is accomplished through the Department's natural resource programs on state forests and other state lands, land acquisition and technical assistance to private landowner's programs.

The Department employs multiple-use principles to ensure sustained and optimum productivity of Florida's 835,000 acres on 30 state forests. The most current scientific knowledge is used to ensure good stewardship and the practice of silviculture based on sound ecological principles. The Department supports other state agencies as a cooperating manager on 275,000 acres and assists management on an additional 285,000 acres of public forests through special agreements with such public entities as the Department of Environmental Protection, water management districts and various counties.

Contracts worth approximately $3.6 million were prepared to acquire additional acreage through the agency's inholding and addition program. A total of 26,974 acres was also added to the state forest system during the year.

All of these lands are managed to provide as many compatible uses and benefits to the public as possible while still providing protection for threatened or endangered species of plants and animals. The public recreational opportunities on these lands include fishing, hunting, hiking, picnicking, canoeing, camping, swimming, bird watching, bicycling and horseback riding. Approximately 692,000 visitors participated in these activities during the year.

The management of state forests generated revenues of approximately $3,360,000 during the year, with an estimated $2,660,000 coming from the sale of timber and the remainder primarily from recreation fees charged by the Department.

The Department pays 15 percent of the revenue from state forest operations to the counties in which these forests are located. The revenue returned to counties for 1999-2000 totaled $554,000. There are substantial direct and indirect benefits provided to local governments from the management of these lands.

Technical Assistance

The Department provides technical assistance to help private landowners and communities make intelligent decisions to develop and achieve their objectives in forest land management.

During the 1999-2000 fiscal year, the Department offered 34,718 technical consultations to private landowners, primary and secondary wood-using industries and local governments through its 37 county foresters. County foresters prepared forest management plans for 793 private forest landowners on 78,691 acres and advised 303 landowners on tree-planting projects that reforested 11,177 acres.

Florida's Forest Stewardship Program is part of a national initiative to encourage private forest landowners to manage their properties for multiple-use. Through the Department's leadership, 70 forest stewardship plans were completed on 16,271 acres. Seven landowners were certified as Forest Stewards during the year.

The Department's Andrews Nursery produced and sold 31.4 million bare root pine seedlings and 3.4 million containerized pine and wiregrass plants to 1,475 Florida customers. This produced more than $1,339,420 in revenue.

The Department administered $1.2 million in federal funds through urban and community forestry grants that were provided to nonprofit organizations, local governments and educational institutions for tree planting and other projects that enhance communities' ability to care for their public tree resources.

Additionally, the Department certified three new communities as Tree City USA and 25 cities as Tree City USA Growth Communities. There are now 118 Florida cities designated as "Tree Cities."

Field Operations

The Department's forestry programs are implemented by its Field Operations staff located in 15 district offices across the state. These district offices were recently grouped into four regions, each under a Deputy Chief of Operations. The current organization consolidated manpower, resources and equipment to provide a more responsive and comprehensive approach to land management and fire control statewide.

Forest Resource Planning and Support Services

Forest Resource Planning and Support Services (FRPSS) has four support functions: Planning, Construction, Information Technology and Equipment. Additionally, FRPSS continues to take a panoramic view of the entire Department's mission and operations in order to provide the support services required to protect 25 million acres of forest and serve a half-million annual state forest visitors. All four functions are vital to the readiness in the Department to fulfill its Wildland Fire Fighting, Prevention and Land Management responsibilities for saving lives and property through its $86 million annual operating budget.

Planning is focused on emergency response, wildfire prevention, detection, suppression and land management, and prepares the Department for rapid, efficient execution of its responsibility. Many times the actions of the Department are carried out under adverse circumstances, and the plan must always enhance those actions. The Planning Section collects data to prepare and support the Long Range Program Plan, Annual Report and Interim Reports.

Another vital function is fulfilled by the Construction Section which provides critical planning for and oversight of the Division of Forestry's fixed capital improvement, construction and maintenance

programs. It assures the state's citizens are getting their money's worth in a timely manner, along with certification of standards and quality. During fiscal year 1999-2000, an estimated 30,000 square feet of building space were constructed through this program at a capital cost of approximately $2 million. A typical project is the new Little Big Econ State Forest Headquarters, completed in early 2000 at a cost of $393,000. This complex contains state-of-the-art technology capabilities as well as being designed for public use and recreation. The on-site headquarters, constructed to compliment the surroundings and environment, provides efficient management and utilization of one of the state's newly acquired forests, while serving the people of east-central Florida.

Support of computers and telecommunications is a third FRPSS function – one that is vital during emergency response and essential for day-to-day operations. The Forestry Computer and Communications Section performs such functions as hardware and software acquisition, installation and maintenance, computer applications development, information management, operating the statewide two-way radio system and telephone systems, along with their installation and repair for the Division of Forestry throughout the state. Related functions include Geographic Information Systems (GIS); Global Positioning Systems (GPS); radio licensing; Internet web site management (300 hits/day); and ongoing upgrading of computer networks. During fiscal year 1999-2000, the section implemented the second of the division's three-year, statewide office automation and telecommunications upgrade. New computer and telecommunications technicians were recruited; 155 desktop computers and 5 servers were installed; new communications consoles were installed in 15 dispatch centers; 69 replacement base stations were installed system-wide; 763 mobile and 250 portable radios were replaced, along with replacement of infrastructure items – base station antennas, 46 transmission lines and 30 replacement emergency power generators. This encapsulates, a monumental task to implement the addition of a statewide mutual aid channel to the existing two-way radio system which facilitates communications with all emergency fire response agencies.

The bureau has statewide responsibility for purchasing, managing and maintaining all specialized fire fighting/suppression vehicles and equipment for the Division of Forestry, as well as staff responsibility for management of the 15 major field unit repair facilities. The diverse firefighting equipment managed includes 235 medium transports with bulldozers, 25 truck-tractors with heavy-duty bulldozers and 50 brush patrols with 300-gallon water suppression capabilities, plus 200 4x4 pickup trucks equipped with 80-100 gallon water suppression capabilities. The Department has purchased an estimated $9 million worth of vehicles and equipment to fulfill increased fire suppression and land management responsibilities, meet safety objectives and insure emergency demands for fire-readiness and other disaster assistance are met. Five new innovative Soft Track Carriers (with ultra-wetland design) enhance the Department's fire fighting capabilities by reducing smoke hazards to communities and penetrating formerly inaccessible deep forests and wetlands, while providing a low-impact, ultra-low ground pressure on the fragile eco-systems. The use of modern water-foaming design increases volume delivered and expands fire coverage to the target area by 50 percent, improving suppression/prevention capacity. The state has replaced mainline defense equipment with modified bulldozers equipped with improved safety devices. These machines provide multiple safety benefits that include preventing operators from inhaling most of the toxic fumes, increasing protection from radiant heat by 30 percent, diminishing considerable equipment loss by fire damage, providing a cab with a smoke-free environment which reduces operator fatigue due to smoke inhalation as much as 50 percent , reducing injuries from hazardous-debris and improving personal safety from burnovers.

Providing Forest and Environmental Conservation educational opportunities to the public is crucial to promoting understanding of and preserving respect for our forests and the environment. The Department meets this growing need through four programs. The Florida Forest and Environmental Education Summer Camp consists of a one-week camp for teachers followed by two or more week-long sessions for youth age 10-14 dealing with environmental issues that impact Florida's forests. The summer 1999 program had 55 teachers and 183 students participating. Wildfires caused these camps to be canceled in summer 2000. Another program dealing with older students and more in-depth forestry and environmental topics is the Future Farmers of America (FFA) summer camp. During summer 2000, two week-long Forestry Training Camps were conducted at O'Leno State Park, with a total of 120 FFA students participating. Approximately 500 FFA students from FFA clubs in 80 Florida schools participated in the annual state-wide district Forestry Contests, culminating with 11 schools competing in the State Championship in Perry. The Florida Forests Forever Showvan continued visiting schools, fairs and other community agricultural events sharing the message of the value and importance of Florida's forests through an interactive computer CD-ROM program. The Showvan has reached over 73,000 visitors since its beginning in October 1997. Numerous requests for educational materials and information on Florida State Forests and lands are received throughout the year. Forestry staff throughout the State are also continually involved in environmental education programs, Project Learning Tree Workshops and Envirothons.

Forestry Youth Academy

The fourth core forestry program is the Forestry Youth Academy located in Goethe State Forest in Levy County. At the academy, sound academic and occupational training programs offer juvenile offenders the opportunity to redirect their lives toward productive goals. The academy provides both technical forestry training and life skills training to develop useful members of society.

The Forestry Youth Academy, which began operating in June 1996, is a residential program for youthful offenders 16 to 18 years of age. The academy provides training for youthful offenders from throughout the state of Florida. The strategy for changing these young men's lives is to correct their academic deficiencies by offering them a high school program based on competency learning. Another important element is teaching students marketable skills, such as fire fighting, carpentry, small engine repair, heavy-equipment operations, agri-science and culinary arts. Moreover, the academy teaches practical subjects within the life skills and social skills programs that will make the difference in the years following graduation from the academy.

Since the Forestry Youth Academy is also classified as a second-chance school by the Department of Education, the emphasis has been to teach in a work setting. Through this, students gain important work experience, which is the foundation of a work ethic. The legacy of this training is the various projects constructed by the students and left for the forestry and local communities to use and enjoy.

Agricultural-Environmental Awards

Commissioner Crawford presented the "2000 Commissioner's Agricultural-Environmental Leadership Award" to two agricultural operations in recognition of their leadership in promoting progressive environmental practices. This year's winners are Evans Properties, Inc., located in Vero Beach, and Pacific Tomato Growers, Ltd., located in Palmetto.

Nominations for the awards were received by a screening committee composed of scientific and technical experts with the Department, which selected the finalists. The two winners were then selected from the group of finalists by a selection committee made up of representatives from The Nature Conservancy, the state's Water Management Districts, the Florida Farm Bureau, the Florida Cattlemen's Association, the Florida Dairy Association, the Florida Department of Environmental Protection, the Florida Fruit and Vegetable Association, the Florida Fish and Wildlife Conservation Commission, Florida's Soil and Water Conservation Districts, Florida Citrus Mutual and the Florida Forestry Association.

SAFEGUARDING CONSUMERS

Consumer Services

The Department is the state's clearinghouse for consumer information, complaints and protection. For the 1999-2000 fiscal year, the Department handled more than 39,400 written complaints; answered approximately 1,050 phone calls per day, filled a daily average of 250 requests for brochures, pamphlets and booklets and provided over 50 educational speakers, while distributing thousands of educational brochures for various organizations all over the State. In addition, the Department maintains a web site offering Florida consumers timely information and resources (www.800helpfla.com).

Call Center

The 19 Call Center staff members operate the consumer hotline, 1-800-HELPFLA or 1-800-FLAYUDA for Spanish-speaking consumers. This year, the Call Center received a much-needed telephone and reporting system. The center fielded approximately 238,000 calls from consumers. Since the installation of the new system, the abandon call rate has decreased dramatically to a low seven percent of all calls received through the center. The new system allows management to analyze call data and make better decisions for allocating resources. A Call Center survey, which boasted a 12 percent return, showed 76 percent stating that the Call Center is doing an extremely good job providing accurate and courteous consumer assistance.

The Call Center assists individuals daily on consumer-related issues, refers them to appropriate governmental offices and inputs all calls in the Department's computer database to develop statistical information. Questions involve various areas the Department regulates: Telemarketing, No Sales Solicitation, Sellers of Travel, Solicitors of Contributions, Business Opportunities, Health Studios, Dance Studios, Pawn Shops, Lemon Law, Food Safety and Pest Control Businesses. Call Center analysts also respond to inquiries on subjects ranging from landlord and tenant disputes to buying clubs and from sweepstakes to retail store regulations. Each call taken is categorized in a specific subject in the database which helps the Department track those issues that are most pertinent to consumers. This record keeping enables the Department's consumer education efforts to be tailored for specific topics. In addition, the database is vital when preparing analysis for use in legislative and community efforts.

Consumer Complaints

The Complaints Section within the Department receives written complaints dealing with a multitude of subjects from consumers and forwards them to the most appropriate agency responsible for that subject area. However, if the complaint does not fall within the jurisdiction of another agency, the Complaints Section seeks to resolve the complaint by using an informal method of mediation. Because of the wide range of complaints received, each analyst is required to be knowledgeable in various areas. Some of the areas that are not regulated by other agencies, but are handled by the Complaints Section, include beauty products, swimming pools, landscaping, investments and more. For the 1999-2000 fiscal year, 21,348 new written complaints and inquiries were received and processed by the Complaints Section. Non-regulated complaints administered by the Department outweighed the regulated complaints by 54 to 46 percent. (The top five non-regulated complaint categories include: credit and banking, communications, mail order, construction and medical.)

Regulated Programs

When the complaints do fall within one of the Department's regulated programs, a complaint analyst within that program handles the complaint. Each program falls under the jurisdiction of a statute or law that Florida legislators have created to protect consumers. All programs except for No Sales Solicitation also require a bond or letter of credit in the event consumers are harmed as a result of a violation.

Assistive Technology Devices

Assistive Technology Devices (ATD) registered 184 ATD manufacturers and administered over 20 complaints in its first year as a regulated program. Businesses that are involved in selling, leasing or manufacturing manual and motorized wheelchairs, motorized scooters, voice-synthesized computer modules, optical scanners, talking software, Braille printers and other similar devices, are now required to register with the Department and provide warranties on their products.

Business Opportunities

The Business Opportunities Program requires individuals who sell or lease any products, supplies or service for the purpose of starting a business to register and disclose certain information to prospective purchasers. Over 1,400 written complaints were filed under the business opportunities

category and consumers received over $21,500 in refunds, while over $50,500 in administrative fines were posted in the 1999-2000 fiscal year.

Dance Studios

The Dance Studios Program requires those offering dance lessons to be registered with the Department. In some instances, these individuals are required to post a surety bond or letter of credit. Last year, approximately $1,000 was collected for consumer refunds.

Health Studios

The Department's Health Studios Program regulates those who offer health club activities, such as training or equipment to further physical exercise according to the Health Studio Contract Law. Some health studios are required to post security to satisfy claims that may arise as a result of violations of Florida law. For the 1999-2000 fiscal year, the Department received 1,601 complaints, refunded over $70,200 back to consumers and posted more than $22,800 in administrative fines to various studios.

Lemon Law

The Department administers the Florida New Motor Vehicle Warranty Enforcement Act, commonly known as the"Lemon Law." Department personnel respond to consumer complaints and inquiries, provide information about the law and determine whether claims are potentially eligible for arbitration before the Florida New Motor Vehicle Arbitration Board.

During the year, the Department re-certified informal dispute settlement procedures submitted by General Motors, Honda/Acura, Nissan/Infinity, Rolls-Royce/Bentley, Saab, Volkswagen/Audi, Alfa Romeo, Porsche, American General/Hummer, Isuzu, Hyundai, Kia Motors, Daewoo, Lexus, Saturn and Workhorse Custom Chassis to utilize the Better Business Bureau Autoline.

For the 1999-2000 fiscal year 23,675 telephone calls were received on the Department's Lemon Law hotline, 1-800-321-5366. In addition, 1,615 written arbitration applications were reviewed, of which 1,307 were declared eligible for Lemon Law arbitration.

Motor Vehicle Repair Shops

The Department also handles the registration and compliance of motor vehicle repair shops. All motor vehicle repair shops are required to register with the Department according to the Florida Motor Vehicle Repair Act. The Act also requires a comprehensive disclosure of repair estimates to consumers for work exceeding $100. Over 19,880 shops registered with the Department for fiscal year 1999-2000. There were over 7,700 violations and investigations throughout the year. The Department received 2,433 complaints, with over $174,000 in consumer refunds awarded. An additional $26,960 of administrative fines was collected.

Pawn Shops

The Pawn Shops Program handles the registration of those who are in the activity of advancing funds in exchange for personal property that will be stored in the pawnbroker's possession until the consumer redeems the merchandise according to the agreed upon terms or the pawn contract de-

faults. The Pawn Shop section received over $7,340 in consumer refunds and posted $15,500 in administrative fines. Approximately 1,200 shops registered this fiscal year.

No Sales Solicitation

The No Sales Solicitation Law is a privacy law that helps protect consumers from unwanted telephone solicitation. In order for consumers to be protected from unwanted solicitors, they are required to subscribe to the "No Sales Solicitation Calls" list annually. Fiscal year 1999-2000 introduced the multi-year renewal option, which allows consumers to renew up to five years in advance. Once they are on the list and receive an unwanted phone call from a non-exempt business, they can file a complaint to cease the calls. The program received 33,685 new subscribers and had an 80 percent renewal rate with 77,230 applicants. The program received 7,299 complaints and collected over $46,600 in fines this fiscal year.

Sellers of Travel

The Department administers the Sellers of Travel Act. The program obtained refunds totaling over $135,500 for consumers in the 1999-2000 fiscal year. Nearly 5,300 sellers of travel and independent agent registrations and complaints were processed.

Solicitation of Contributions

The Solicitation of Contributions Act requires charitable organizations, sponsors, professional fund-raising consultants and professional solicitors to register with the Department. Total registered organizations (charities, sponsors, professional solicitors and fund-raising consultants) reached 6,804 for the 1999-2000 fiscal year, up 13 percent from last year. The Department received $1,121,973 in registration fees alone.

Telemarketing

The Florida Telemarketing Act requires non-exempt businesses that engage in the sale of consumer goods or services by telephone to be licensed and post security. Last year, over $15,700 was collected from bond claims and refunded to consumers. The Department registered 242 businesses and handled 1,380 complaints for this fiscal year.

Investigations

The Department Investigations group opened 997 cases for this fiscal year. Of those cases, 512 were closed satisfactorily, with a total of $112,440 received in fines. Department personnel conduct undercover investigations of particular consumer complaints and approach businesses not in compliance with Florida statutes to direct them into compliance. High volume cases for the year include 397 price-gouging cases, 122 after market crash parts in motor vehicle repair and 164 cases surrounding solicitors of contributions. Topping off the high-volume cases were sellers of travel and business opportunities with 68 and 42 cases, respectively.

Consumer Education

To better educate Florida's citizens, the Department devised an educational outreach program which entailed having a Department representative present consumer-related topics to various groups and organizations throughout the state. This year was the busiest and most successful yet. Over 50 organizations have taken advantage of this free service. Representatives have reached thousands of consumers through this education channel. Several organizations have already requested speakers for events in 2001, with consumer audiences of 200 or more attending each function.

Other educational efforts include revamping the Consumer Services web site to include more information relating to registration for the various programs the Department regulates; alerting consumers of scams and frauds through the media; distributing various brochures regarding issues of consumer life and circulating relevant consumer articles to interested groups. The Department printed 250,000 consumer related brochures and 10,000 four-color magnets that advertise the 800-HELPFLA hotline and web site, both for statewide distribution.

LP Gas Inspections

During the 1999-2000 fiscal year, a record 7,937 licenses were issued. Department personnel conducted 5,197 LP gas facility inspections; 1,012 investigations into illegal activities, complaints and accidents and 61 training classes. More than 6,000 requests for assistance were responded to from dealers, building officials, fire inspectors and other officials. Additionally, the Department took 4,411 enforcement actions, including 149 Notices of Non-compliance, 215 redtags, 11 administrative complaint actions and over 1,000 Cease and Desist Notices.

As a part of industry and consumer outreach programs, the Department published and distributed consumer brochures on gas grill safety, home heating safety and reporting of residential LP gas system changes to gas suppliers.

Weights and Measures

The Department performed inspections and tests on more than 71,000 weighing and measuring devices, including retail scales, prescription balances, livestock scales, truck scales and taxi meters. Of those inspected, 9,525 were found to be out of compliance with state standards and ordered corrected; another 1,784 were immediately taken out of service.

Department inspectors routinely check the accuracy of net contents and labels of non-food packaged goods such as dry goods, detergents and household items, building and construction materials, gardening products and hundreds of other products purchased daily by consumers and businesses in the state. In the 1999-2000 fiscal year, inspectors sampled lots representing over 1.5 million packages with a value exceeding $3.5 million. Stop-sale orders were placed on 46,893 packages that contained less than the stated contents or failed to provide the required information on the label. Many more packages were recalled or relabeled by producers as a result of Department inspections.

Inspectors randomly tested 25,900 items for price accuracy in 422 businesses, primarily grocery, department, discount, drug, building supply and other retail stores. Overall results showed that 1.2 percent scanned at more than the posted price and two percent

scanned at less than the price advertised. Violations were corrected immediately, and businesses that failed to meet the 98 percent national accuracy standard face additional sanctions.

In the state metrology laboratory, state standards of mass, length and volume were used in comparing and calibrating more than 12,000 devices used by state inspectors, laboratories, high-tech industries and commercial scale repair agencies, as well as more than 750 test measures used to check the accuracy of gas pumps and wholesale meters. The lab also performed special tests, including verifying the uniformity of lottery balls used by the Florida Lottery and standardizing grain samples for use in testing moisture determining equipment at commercial grain elevators.

Fair Rides Inspection

All amusement rides, except those at large permanent amusement facilities that are exempt by law, are periodically inspected and are permitted each year. Permanent amusement rides, those which are located at a fixed site, are inspected twice yearly, and temporary amusement rides, such as those at carnivals, are inspected each time they are moved or set up.

The Department has 15 inspection specialists who inspect and permit all amusement rides in the state. In fiscal year 1999-2000, the Department permitted over 1,800 amusement devices and conducted 9,990 inspections statewide. Those inspections identified approximately 10,000 deficiencies, all of which were corrected before the amusement ride was allowed to open for public use. During the past year, the Department also issued 243 stop operation orders for unsafe or uninspected amusement rides. The Department also has authority to investigate accidents or incidents and, when appropriate, close or impound unsafe amusement rides.

The Florida Amusement Device and Attraction Advisory Committee advises and consults with the Department on amusement ride issues. This committee, appointed by the Commissioner, consists of members from the amusement industry, fair industry, large exempt parks and technical or subject matter experts. The committee holds at least two public meetings annually to discuss pending issues in amusement ride safety, inspections, equipment and matters of concern with the Department.

The Department is a member of the American Society of Testing and Materials, Committee F-24, which develops standards for manufacture, fabrication, performance and testing of amusement rides and devices. The Department is also a member of CARES (Council for Amusement and Recreational Equipment Safety), an association of government regulatory officials which share information and work with the Consumer Products Safety Commission on amusement ride concerns. Department inspectors are trained to inspect amusement rides with recurring on-the-job training and continuing education seminars sponsored by the amusement industry, amusement ride manufacturers, safety organizations and subject matter experts, such as engineers. The Department has an amusement ride inspection program which, by reputation, is the most comprehensive amusement ride inspection program of any state in the country.

Petroleum Inspection

The Department regularly conducts inspections of the petroleum distribution system and analyzes samples of petroleum products to ensure that consumers are offered quality products at fair measure.

In the 1999-2000 fiscal year, more than 99 percent of the samples collected and analyzed from 13 billion gallons of petroleum fuel distributed throughout Florida met state standards, which are considered among the strictest in the nation. The Department issued 495 stop-sale orders to prevent the sale of 6.1 million gallons of substandard fuel.

The quality of gasoline, kerosene, diesel and fuel oil are determined at Department laboratories through analyses of octane rating, distillation, vapor pressure, sulfur content and flash point.

Laboratory personnel analyze antifreeze for corrosion, freezing point, boiling point and chemical content as part of the antifreeze registration and regulatory program. Similarly, brake fluid also must pass strict standards for boiling point, elastomer swelling and chemical content before being registered by the Department for sale to the public. The Department registered 336 brands of antifreeze and brake fluid as acceptable products to be marketed in Florida.

In all, laboratory analysts at Department laboratories in Tampa, Tallahassee and Port Everglades analyzed 63,240 samples of petroleum fuels, antifreeze and brake fluid.

Department inspectors conducted approximately 211,962 petroleum inspections on 164,000 retail dispensers, vehicle tanks, wholesale meters and storage tanks at 9,295 petroleum facilities throughout Florida.

Inspections included calibrating tests, proper installations and maintenance of measuring devices and labeling of petroleum dispensers. As a result of these inspections 7,148 pumps were taken out of service because of improper calibration and 22,543 correction notices were issued for poorly maintained pumps.

The Department handled 2,494 petroleum-related consumer complaints as a result of posting the 1-800-HELPFLA consumer hotline decal on petroleum dispensers. Complaints have concentrated on fuel quality, meter accuracy and price. The field staff is charged with responding to these complaints within 24 hours.

The Department continues to use numerous fraud investigation techniques including the deployment of undercover vehicles to further ensure that consumers receive fair measure from petroleum pumps. The unmarked vehicles have a specially designed and calibrated gasoline tank that enables a trained inspector to determine a pump's calibration without a service station operator's knowledge. The undercover vehicles have confirmed that most petroleum pumps are accurate, and consumers are receiving fair measure.

Pest Control Section

During fiscal year 1999-2000, the pest control section was relocated from Jacksonville to Tallahassee. A new licensing program, acquired in March 1999, underwent a major version upgrade in May 2000 in preparation for the Department's Consumer Services implementation scheduled to occur during the winter of 2000.

The Document Issuance Sub-section issued 3,290 pest control business licenses, 5,782 certified operator's certificates and 34,767 employee identification cards. During the year, 1,373 written

examinations were administered and 8,491 pest control, government/private and limited lawn maintenance certificates were issued or renewed.

The Department investigated 748 formal consumer complaints and conducted 1,433 licensed business inspections. Enforcement activities resulted in the issuance of 471 administrative actions and the imposition of $50,500 in fines.

Throughout the state, the Enforcement sub-section initiated several "special enforcement emphasis" campaigns. There were three commercial/limited lawn maintenance operations carried out in Sarasota, Fort Myers/Cape Coral and Orlando involving over 260 stops resulting in the issuance of 253 cease and desist notices.

There were three subterranean termite pretreat site surveillance operations within Brevard, Fort Lauderdale and Orlando. Surveillance of 16 different pretreatment sites involving 11 different companies resulted in 8 pretreat deficiencies.

Special fumigation surveillance operations, designed to observe aeration and clearance procedures, were initiated in Hillsborough, Broward and Dade counties. A total of 41 pretreatment sites were observed, and 14 major deficiencies noted. These cases are moving through the administrative process.

Mosquito Control Section

The Mosquito Control Section provides technical assistance to all counties, communities and private developments that operate a mosquito control program. In is estimated that as many as 400 programs may be in operation throughout the state. The annual combined budgets of the 52 organized mosquito control districts operating under Chapter 388, F. S. is approximately $75,000,000. These districts received a total of approximately $2,000,000 in state aid from the Department during the year.

The Mosquito Control Section was reorganized during this year in addition to relocating to Tallahassee. The Dog Fly Control Section in Panama City was renamed the Operational Support Section to reflect the operational aerial spray support mission for mosquito control as well as dog fly control. The supervisory position for this section was upgraded to an Environmental Manager, and the responsibility for supervising mosquito control inspection and compliance was added to the duties of supervising dog fly control and aerial mosquito control support. Aircraft maintenance on the DC-3 was procured through a vendor contract, and the aircraft mechanic position was converted to a mosquito control inspector position, bringing the number of mosquito control inspectors to two. A newer DC-3 aircraft was purchased from Collier County Mosquito Control to replace the Department's DC-3 which was suffering from significant airframe corrosion problems.

The Mosquito Control Section completed 67 routine inspections and investigated six complaints about mosquito control activities. There were 40,513 acres treated for dog flies and no aerial spray missions for mosquito control. There were seven Public Health Pest Control certification training sessions provided, and 279 Public Health Pest Control Licenses were issued.

Efforts to streamline reporting of mosquito control activities were continued through the distribution of an updated version of the Vector Control Management System to all participating mosquito control districts. Ten districts have converted to using this software to document and report their activities to the Department electronically. Five other districts began using portions of the software to document some of their activities and plan to begin electronic activity in the near future. Five computers were transferred from the Department to mosquito control districts to assist in the development of computerized data storage and transmittal.

PROMOTING EMPLOYEE EXCELLENCE

Training and Development

In order to ensure optimal service to the citizens of Florida, the Department invests in its employees by providing numerous training, educational, development, enrichment and recognition opportunities. This supportive environment contributes to the superior level of personal commitment and professional pride of its staff.

The Department continuously trains its employees, thus increasing their knowledge, skills and abilities in order to provide the highest quality of service. This year, a total of 1,206 employees participated in traditional training classes, such as New Employee Orientation, Achieving Extraordinary Customer Relations, Valuing People/Human Diversity, Department Supervisory Standards Training and Computer Skills (Access, Excel, Word, WordPerfect, Project, PowerPoint, Front Page, Communicator, Paradox and Quattro Pro). In addition, 415 user licenses and 32 technical licenses were issued to employees to allow their participation in Internet-delivered management and computer classes offered by Element K.

Tuition waivers were issued to 116 employees so that they could further their education at any of the ten state universities which participate in the college tuition waiver program.

A total of 43 Department managers participated in the Certified Public Manager Program, and since its inception, 101 have received the designation of Certified Public Manager after having successfully completed the program.

Awards

The Department not only encourages furthering employees' education, it wholeheartedly believes in rewarding those who attain exemplary achievements. Twenty-eight nominations were submitted for a Davis Productivity Award, detailing the extraordinary efforts of 506 individuals in the Department. Award winners are announced at the end of each year.

Employee suggestions were submitted by 32 individuals, and 12 awards were given for adopted suggestions for a total cost savings of $4,990.08. Another 83 employees were recognized for superior accomplishment and 582 for length of service to the state.

EMERGENCY RESPONSE

Care and Welfare of Livestock and Pets

Emergency Support Function 17—Animal Protection

The Department, designated as the lead agency for Emergency Support Function (ESF) 17, animal issues, in the State's Comprehensive Emergency Management Plan (CEMP), is responsible for coordinating the response of state agencies in assisting local and volunteer organizations to provide for animals affected by a disaster and to work with counties to secure the availability of animal shelters, along with food, water and medical supplies for animals displaced during natural disasters or other emergency situations.

National Animal Disaster Conference

In conjunction with the Humane Society of the United States (HSUS), the Florida Division of Emergency Management (FDEM) and USDA, the Department hosted the first-ever National Animal Disaster Conference on March 22-24, 2000. The three-day event in Orlando attracted 300 people from 36 states and Great Britain. The goal of the conference was to encourage every local community and state to have plans to prevent or minimize the impact of disasters on animals and their owners. Con-

ference participants ranged from state veterinarians to grassroots animal responders. During the conference, attendees learned about developing community disaster plans for animals, organizing animal response teams, developing pet friendly shelters, protecting large animals and addressing wildlife issues and public health concerns.

The Department continued to work with counties to assist and encourage them in developing a master plan for mass animal medical care, evacuation, rescue, capture, temporary confinement, food and water needs.

Mouse Eradication in Apopka

In October 1999, Department personnel responded to a unique challenge in Apopka in Orange County. Some time before, the state bought farmland along Lake Apopka, stopped using the pesticides and rodenticides that had been used previously on that land and ceased mowing the area so it could return back to a "natural state." Unfortunately for the residents of Apopka, the "natural state" of that area was extremely conducive to producing field mice, and the mice overran the city. The Mouse Eradication Task Force incorporated the emergency management system in Orange County and set up a hotline for residents to contact regarding mouse questions. Residents were urged to take precautions, such as cutting their grass short and eliminating other places where mice could hide. Department inspectors assisted in distributing live traps, and private pest control companies were called in to complete the eradication. Fortunately, this eradication was accomplished without a major outbreak of leptospirosis, a bacterial disease often carried and transmitted by mice.

Foreign Animal Disease Response Plan

The Department also maintains a plan for responding to a foreign animal disease outbreak. This plan utilizes the Florida emergency management system in cooperation with USDA. This plan is being modified to address intentional introduction of foreign animal disease, or bioterrorism. A Department representative is on the state team to develop plans against terrorism in Florida and weapons of mass destruction.

In addition, the Department sent personnel to the USDA Foreign Animal Disease Diagnosis Training at Plum Island, New York. Participants had an opportunity to see clinical cases of certain foreign animal diseases. Such training will make veterinarians more aware of certain diseases, including anthrax, classical swine fever, foot and mouth disease and heartwater.

Wildfires

The continuing drought that began in March 1998 continues through to the present. Rainfall deficits range from eight inches in the panhandle to over 18 inches in central Florida. This once again set the stage for a serious wildfire season in 2000, burning 201,148 acres with a total of 6,394 fires. During this time, Florida experienced loss or damage to 47 homes, 254 structures (outbuildings, barns etc.) and 34 vehicles. The Division of Forestry deployed field teams of safety officers during the peak of the fire season (April-June)

to assist the local field units in mitigating potential hazardous activities that would put fire fighters in jeopardy. The Division of Forestry fire fighters saved 1,782 homes and outbuildings as well as 105 vehicles.

The Department's pro-active response in the establishment of a Wildfire Arson and Prevention Task Force Team was aimed at reducing human-caused fires in Florida. The Commissioner also declared a statewide severe drought emergency on May 17, 2000 that prohibited all open burning in Florida. This declaration remained in effect through June 19, 2000.

A unified Florida State Command was established in April 2000. This cooperative effort in wildfire management provided superior methods for the distribution of critical information to all emergency responders statewide and more efficient coordination of resources and public information. Fire Prevention Team deployments and the Unified Florida State Command Cooperative efforts allowed the Department to effectively respond to a wildfire threat with climatic extremes that exceeded those of the past two years. This was supported by a quick initial attack response by both state and federal ground and air resources.

The Office of Agricultural Law Enforcement helped conduct arson investigations on many of the human-caused wildfires and provided assistance to local agencies in managing other disaster situations.